MFJ 2005 Ham Catalog

MFJ Small, high efficiency *Loop Tuner*™

Turns any wire loop into small, high efficiency multi-band transmitting loop antenna

Detachable PVC Cross Mount → **New!**

MFJ-935 (top) **$199.95** Ship Code C

MFJ-936 **$249.95** Ship Code D

Drape a wire around a bookcase and attach both ends to this new *MFJ Small Loop Tuner*™. *It instantly turns into a small, high efficiency multi-band transmitting loop antenna!*

You can operate 7 to 30 MHz with a full 150 Watts. No ground, radials or counterpoises needed.

A 10 foot wire formed into a loop operates 20-15 Meters (5 foot for 17-10M; 24 foot for 30-40M).

You can tune *any* shape loop -- circle, square, rectangle, *any* odd shape. A quarter wavelength wire shaped as a circle is the most efficient.

A fixed wire length covers about 1.5 to 1 frequency range (i.e. 28-18 or 10-7 MHz, etc.). Exact frequency coverage depends on wire length, loop shape and environment.

You'll radiate a low angle DX signal that literally rivals full size dipoles -- work incredible DX!

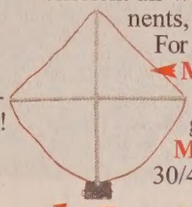
It's a very quiet receiving antenna -- you'll hardly notice static crashes. Its high-Q rejects out-of-band interference, reduces overloading, harmonics.

It's perfect for apartments, antenna restricted areas and portable operation -- *it really gets out!*

Has MFJ low loss *Butterfly* loop tuning capacitor, no rotating contacts (available separately, **MFJ-19, $69.95**). Built-in RF antenna current ammeter for tuning. Mount for PVC Cross. MFJ-936, 9¼Wx4½Hx8½D"; MFJ-935, 7½Wx4¼Hx7½D".

See June, 1986, *QST* or recent *ARRL Antenna Handbook* for more on small, high efficiency loops.

MFJ-936, $249.95. For home stations. Has more efficient air wound inductor, heavier components, larger meter. **MFJ-935, $199.95.** For portable/home stations. Smaller, lighter.



MFJ-57, $29.95. PVC Cross for mounting loop on cover. 20-15M, insulated 10-gauge flexible loop, low resistance lugs. **MFJ-58, $49.95.** Has MFJ-57 above, 30/40M loop/wire clips, 17-10M loop.

MFJ 1500 Watt *Fully Balanced* Antenna Tuner

New!

The MFJ-976 is a 1500Watt full Legal Limit *fully balanced* antenna tuner. **You** get *superb* current balance, very wide matching range (12-2000 Ohms) and *continuous* 1.8-30 MHz coverage including all WARC bands. Handles *full* 1500 Watts SSB *and* CW.

MFJ-976 **$499.95** Ship Code E

You can tune *any* balanced lines including 600 Ohm open wire line, 450/ 300 Ohm ladder lines, 300/72 Ohm twin lead -- shielded or unshielded. Also tunes random wires and coax fed antennas.

MFJ's *fully balanced* extremely wide-range T-network gives you simple, fast three knob tuning. No complicated switching between high and low impedance and switching in additional capacitance of L-networks.

Four separate 500 pF in two gangs gives you a total of 2000 pF for highly efficient low loss operation on 160 Meters.

You get excellent 10 Meter performance because of MFJ's low minimum capacitance and exclusive *Self-Resonance Killer*™ high-Q *AirCore*™ roller inductor with silver plated contacts.

Heavy duty 1:1 current balun gives you *superb balance* and stays cool even at 1.5kW.

True *active* peak reading lighted Cross-Needle SWR/Wattmeter lets you read SWR, *true peak* or average forward and reflected power all at a glance on 300/3000 Watt ranges. 12Wx6Hx15¾D in.

See inside for these New MFJ Products!

5-Time Zone Quartz Wall Clock
MFJ-135 **$39.95**
See Page 28

Wire Antennas
MFJ-1742 $79.95
20M Extended Double Zepp
MFJ-1748, $69.95
80M End-Fed Zepp
MFJ-17754, $59.95
40/20M Dipole
MFJ-17758, $79.95
80/40M Dipole
See Page 43

Balanced Line antenna switch
MFJ-1706, **$89.95**
5-way binding posts
MFJ-1706H, **$99.95**
ceramic feed-thru insulators
See Page 10

Radio to Antenna Safety Switch
Prevents transmitting into an open circuit
MFJ-1703, **$19.95**
See Page 10

Heavy Duty Antenna Tripod
MFJ-1919 **$79.95**
See Page 42

***Custom Fit Foam* Hard Carrying Case**
MFJ-6404 **$39.95**
See Page 13

Goose Neck Microphone Holder
MFJ-390 **$14.95**
See Page 22

MFJ-3307 **$19.95**
"Antennas from the Ground Up" Book
MFJ-1401 **$19.95**
Kit converts 2M mobile antenna into base antenna
See Page 46, 39

***Stainless Steel* Mobile Whips**
MFJ-1964 $19.95
72 Inches
MFJ-1966 $24.95
108 Inches
See Page 42

Ceramic Strain Insulators
MFJ-17A01, $1.95
for 3/16" wire
MFJ-17B01, $3.95
for 1/4" wire
MFJ-17C01, $5.95
for 5/16" wire
See Page 43

Ear Mic Speaker/Mic
MFJ-283, $39.95
Superb mic audio!
MFJ-5510, $6.95
Cigarette Lighter Adapter for MFJ Accessories.
See Page 35, 12

Cable adapters
RS-232 to USB: MFJ-5429
USB to parallel port: MFJ-5427 (DB-25), MFJ-5428 (Centronics)
$24.95 each
See Page 34

MFJ ENTERPRISES, INC.,
300 Industrial Park Road,
Starkville, MS 39759
Phone: (662) 323-5869; 8-4:30 CST, M-F; **Fax:** (662) 323-6551

MFJ ENTERPRISES, INC. 1972 33 ANNIVERSARY 2005 STARKVILLE, MS

For your nearest dealer or to order call 800-647-1800

Visit our web site . . . http://www.mfjenterprises.com

MFJ-989C *Legal Limit* Antenna Tuner

More hams use MFJ-989s than any other legal limit antenna tuner in the world! Why? Because MFJ uses super heavy duty components to make the world's finest legal limit antenna tuner

MFJ-989C

$359.95

Ship Code E

- *AirCore™ Roller Inductor*
- *Super Heavy Duty Components*
- *Cross-Needle SWR/Wattmeter*
- *Antenna Selector*
- *TrueCurrent™ Balun*
- *Built-in Dummy Load*
- *Made in THE U.S.A.*

MFJ uses super heavy duty components -- roller inductor, variable capacitors, antenna switch and balun -- to build the world's most popular high power antenna tuner.

The rugged world famous MFJ-989C handles 3 KW PEP SSB amplifier input power (1500 Watts PEP SSB output power). Covers 1.8 to 30 MHz, including MARS and WARC bands.

MFJ's *AirCore*™ Roller Inductor, new gear-driven turns counter and weighted spinner knob gives you exact inductance control for absolute minimum SWR.

You can match dipoles, verticals, inverted vees, random wires, beams, mobile whips, shortwave -- nearly any antenna. Use coax or balanced lines.

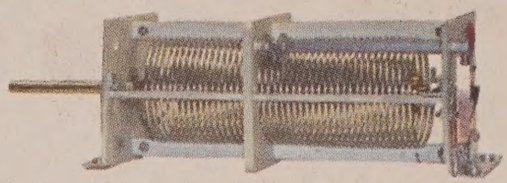
You get everything you've ever wanted in a high power, full featured antenna tuner -- widest matching range, lighted Cross-Needle SWR/Wattmeter, antenna switch, built-in dummy load, balun -- all in a sleek, compact cabinet.

MFJ builds the world's most popular high power antenna tuner using these super heavy duty components . . .

MFJ's exclusive heavy duty *AirCore*™ Roller Inductor has an air core that can't burn up! Get ultra high-Q, lowest loss, highest efficiency and highest power handling of any roller inductor in ham radio.

MFJ's exclusive *Self-Resonance Killer*™ keeps damaging self-resonances away from your operating frequency.

Large, self-cleaning wiping contact



gives excellent low-resistance connection without contact arcing or burning.

Solid 1/4 inch brass shaft, self-align bearings give smooth non-binding rotation.

Competing tuners use a lossy, low Q, solid plastic core with erratic electrical contacts and have potentially damaging self-resonant frequencies. This can cause excessive heating and *melt* the core!

Gear Driven Counter

A precision *gear driven* 3-digit turns counter lets you accurately reset your roller inductor for quick band changing.

Weighted spinner knob on roller inductor gives you smoother flywheel tuning.

Massive Transmitting Capacitors

Look inside . . . you'll see two *super-heavy duty* transmitting variable capacitors that can handle 6000 volts. Extra wide (0.27 inch) stator plate spacing gives you arc-free operation.

Specially shaped plates give low minimum capacitance when unmeshed. This and a hefty 250 pf maximum give you an extremely wide matching range -- even on 160 and 10 Meters.

Super Antenna Switch

MFJ-989C's *super heavy duty* antenna switch is made of *two* individual *ceramic* wafers wired in parallel. Extra wide spaced, heavy duty contacts handle extreme voltages and currents. *We've never burned one up!*

You can select two coax antennas (directly or through tuner), balanced line/random wire, or built-in dummy load.

MFJ *TrueCurrent*™ Balun

MFJ's super heavy duty *TrueCurrent*™ balun for balanced lines uses *two* giant 2½ inch toroid cores. It's wound with *Teflon*® wire connected to high-voltage *glazed ceramic* feedthrough insulators.

The MFJ-989C lets you safely operate high power into balanced feedlines without core saturation or voltage breakdown.

Some "legal limit" tuners have inferior voltage baluns with smaller diameter toroid cores and soft plastic feedthrough insulators that can arc and melt.

More reasons why the MFJ-989C is the world's finest high power antenna tuner:

Built-in Dummy Load

A *full-size* 300 Watt non-inductive 50 Ohm dummy load is built into MFJ-989C.

You'll find it handy for transmitter tuning, testing and repairing rigs, setting power level, adjusting mic gain and more.

Lighted Cross-Needle Meter

Lighted *Cross-Needle* SWR/Watt-meter lets you monitor SWR, forward and reflected power *simultaneously*.

Read both peak and average power in two power ranges. Meter lamp requires 12 VDC or 110 VAC with **MFJ-1312D, $14.95.**

Sleek and Compact

The compact MFJ-989C slides right into your operating position -- you'll hardly know it's there. It's just 10¾Wx4⅓Hx15D inches. *Do you want a bulky "legal limit" tuner that's bigger than your amplifier?*

Lexan Front Panel

The MFJ-989C has a new nearly indestructable multi-color Lexan front panel. Its detailed logging scales and legends will be legible for a lifetime of DXing.

Super Construction

MFJ-989C uses PEM nuts (*not* self-tapping screws), wing-nut ground post (*not* a cheap nut), fire-retardant epoxy glass PC board (*not* canvas based), heavy gauge wire throughout.

No Matter What™ Warranty

Every MFJ-989C is protected by MFJ's famous one year *No Matter What*™ limited warranty. We will repair or replace your MFJ-989C (at our option) for a full year.

Outstanding Customer Service

We're here to help keep your MFJ-989C performing flawlessly -- *no matter how long you own it* -- call 662-323-0549.

MFJ KW Differential-T™ Antenna Tuner

. . . Gives you absolute minimum SWR . . . Simple 2-knob tuning . . . Lighted Cross-Needle SWR/Wattmeter . . . AirCore™ Roller Inductor . . . 6-position antenna switch . . . Balun for balanced lines . . . 1.8-30 MHz coverage

MFJ-986

$329.95

Ship Code E

MFJ's innovative *Differential-T*™ tuner uses a differential capacitor that makes tuning easier than ever. Gives minimum SWR at only *one* setting. Broadband design ends constant retuning.

The MFJ-986 is a rugged roller inductor antenna tuner that handles 3 KW PEP SSB amplifier input power (1500 Watts PEP SSB output power). Tunes 1.8-30 MHz *continuously*, including MARS and all the WARC bands.

MFJ's exclusive *AirCore*™ Roller Inductor gives *absolute minimum* SWR -- something tapped inductors just can't do.

3-digit turns counter plus a spinner knob gives precise inductance control so you can quickly retune your frequency.

A *lighted* peak and average reading cross-needle meter shows SWR, forward and reflected power at a single glance!

You get a 6-position antenna switch that lets you select two coax lines and/or random wires (direct or through tuner), balanced line and external dummy load.

The *MFJ TrueCurrentBalun*™ for balanced lines minimizes feedline radiation that causes field pattern distortion, TVI and RF in your shack. *Ceramic* feedthru insulators for balanced lines withstand high voltages and temperatures.

Differential-T Tuner™ . . . . A new twist on proven technology

Replacing two variable capacitors with a *single* differential capacitor gives wide range T-network tuning with just two controls -- a tuning capacitor and a roller inductor.

Simple 2-knob tuning makes tuning easier than ever. You get minimum SWR at only *one* setting and a broadband response that ends constant re-tuning. You'll spend your time QSOing instead of fooling with your tuner.

The compact 10¾x4½x15 inch cabinet has plenty of room to mount the roller inductor away from metal surfaces for highest Q -- you get high efficiency and more power into your antenna. *Wide-spaced* tuning capacitor plates let you run high power without arcing.

Lighted cross-needle meter

MFJ's lighted Cross-Needle Meter shows you SWR, forward and reflected power *simultaneously*. It reads *peak* or average power on 2000 or 200 Watt ranges.

Lamp has on/off switch and uses 12 VDC or 110 VAC with MFJ-1312D, $14.95.

MFJ TrueCurrentBalun™ reduces feedline radiation

Most tuners use a *voltage* balun that forces equal voltages on the two antenna halves. It minimizes unbalanced currents only if the antenna is perfectly balanced -- not the case with practical antennas.

The MFJ-986 uses a *true* current balun to force equal *currents* in the two antenna halves -- even if the antenna is not perfectly balanced!

The *MFJ TrueCurrentBalun*™ gives superior balance over voltage baluns and minimizes unbalanced current. This reduces field pattern distortion, concentrates your power for a stronger signal -- plus it reduces TVI and RF in your shack caused by feedline radiation.

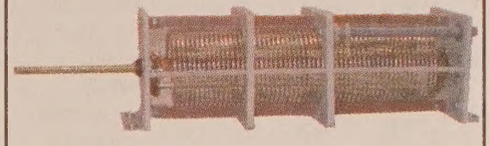
No Matter What™ Waranty

Protected by one year limited warranty.

Call your dealer for your best price!

In stock at ham dealers everywhere.

MFJ *AirCore*™ roller inductor



MFJ's exclusive *super heavy duty AirCore*™ Roller Inductor has an air core that can't burn up! You get ultra high-Q, the lowest loss, highest efficiency and highest power handling of any roller inductor in ham radio.

MFJ's exclusive *Self-Resonance Killer*™ keeps potentially damaging self-resonances away from your operating frequency.

Large, self-cleaning wiping contact gives excellent low-resistance connection without contact arcing or burning.

A solid 1/4 inch brass shaft with self-align bearings gives smooth non-binding rotation.

MFJ-962D *Compact* Tuner for Linear Amplifiers

MFJ AirCore™ Roller Inductor, Compact Size, Lexan scratch-proof front panel... handles AMERITRON's AL-811H!

MFJ-962D

$269.95

Ship Code E

Why settle for a mere 300 Watt antenna tuner when a *few* extra dollars let you add *real* power when you're ready? The MFJ-962D lets you use your barefoot rig now.

When you're ready . . . you can add a powerhouse linear amplifier at no additional cost.

The compact MFJ-962D handles 1500 Watts PEP SSB amplifier input power (800 Watts PEP SSB amplifier output power).

It's perfect for *AMERITRON's* best selling 800 Watt AL-811H or 600 Watt AL-811 amplifiers.

Features MFJ's *AirCore*™ Roller Inductor, new aluminum-skirted knob set including a weighted deluxe spinner knob, ultra compact size (10¾ x4 x 10⅞ inches) and scratch-proof multi-colored Lexan front panel.

Two transmitting tuning capacitors and MFJ's exclusive *AirCore*™ roller inductor gives you precise control to get your SWR down to an absolute minimum.

You get an extremely wide matching range from 1.8 to 30 MHz *continuously*, including MARS and WARC bands.

MFJ's *AirCore*™ roller inductor has an air core that can't burn up. You get ultra high-Q, low loss and MFJ's exclusive *Self-Resonance Killer*™ that eliminates damaging self-resonances.

MFJ's *lighted* peak and average reading Cross-Needle SWR/Wattmeter makes tuning quick and easy. At one glance you can read SWR, forward and reflected power in two power ranges. Meter light uses 12 VDC or 110 VAC with MFJ-1312D, $14.95.

A 6-position *ceramic* antenna switch lets you select 2 coax lines (direct or through tuner), random wire and balanced lines.

You get a heavy duty MFJ *TrueCurrentBalun*™ for balanced lines. High-voltage *ceramic* feedthru insulators let you operate high power into balanced feedlines.

MFJ 300W Roller Inductor Tuner

World's only 300 Watt AirCore™ Roller Inductor Antenna Tuner gives you absolute minimum SWR . . . Covers 6 Meters thru 160 Meters . . .

MFJ-969
$199.95
Ship Code B

MFJ-969 gives you MFJ's superb *AirCore*™ Roller Inductor and full 6 Meters through 160 Meters coverage!

You get everything you've ever wanted including . . . 300 Watts PEP SSB full featured antenna tuner, widest matching range, full-size lighted Cross-Needle SWR/Wattmeter reads true peak forward power, QRM-Free PreTune™, 8 position antenna switch, built-in 50 Ohm dummy load, heavy duty 4:1 balun -- all in a tough, attractive cabinet. MFJ's famous one year *No Matter What*™ limited warranty.

MFJ-969's *AirCore*™ Roller Inductor, gear-driven turns counter and spinner knob gives you exact inductance control for minimum SWR.

MFJ's exclusive *AirCore*™ Roller Inductor has an air core that can't burn up! You get ultra high-Q, the lowest loss, highest efficiency and highest power handling of any roller inductor in ham radio.

MFJ's exclusive *Self-Resonance Killer*™ keeps potentially damaging self-resonances away from your frequency.

Huge self-cleaning wiping contact gives you excellent low-resistance connection without contact arcing or burning.

Solid 1/4 inch brass shaft, self-align bearings -- smooth non-binding operation.

The MFJ-969 covers all frequencies from 160 Meters thru 6 Meters, including the "magic band" -- the widest matching range of any full featured antenna tuner.

Match any antenna

Match dipoles, verticals, inverted vees, random wires, beams, mobile whips, SWL receiving antennas -- nearly any antenna.

You can use coax cable, random wire or balanced lines. Has heavy duty 4:1 balun.

True Peak Reading Cross-Needle Meter

MFJ's new *ActivePeak ReadingCircuit*™ accurately reads *true* peak forward power -- *an MFJ exclusive.*

MFJ's lighted Cross-Needle SWR/Wattmeter reads SWR, *true* peak forward and average reflected power simultaneously on 300 Watt or 30 Watt ranges.

Lamp has on/off switch and uses 12 VDC or 110 VAC with MFJ-1312D, $14.95. *ActivePeakReading Circuit*™ can also use a 9 volt battery.

MFJ's 8 positions let you select two coax fed antennas, random wire/balanced line or built-in dummy load for use through your MFJ-969 or direct to your rig.

MFJ's *QRM-Free PreTune*™ lets you pre-tune MFJ-969 off-the-air into a built-in dummy load without causing QRM.

Pre-tuning into a dummy load makes tuning your actual antenna quick and easy!

The MFJ-969 has a full size non-inductive 50 Ohm dummy load. You'll find it handy for tuning, testing, repairing rigs, setting power level, adjusting mic gain, etc.

The tough aluminum case has a scratch-proof multi-colored Lexan front panel. Compact 3½Hx10½Dx9½W inches.

MFJ-969 AirCore™ Roller Inductor

Ham Radio's *Most Popular* 300 Watt Tuner

More hams use MFJ-949s than any other antenna tuner in the world!

More hams use MFJ-949s than any other antenna tuner in the world!

MFJ-949E
$149.95
Ship Code B

Why? Because the world's leading tuner has earned a worldwide reputation for being able to match just about anything.

Full 1.8-30 MHz Operation

Custom designed inductor switch, 1000 volt tuning capacitors, Teflon® insulating washers and proper L/C ratio gives you *arc-free* no worries operation with up to 300 Watts 1.8 to 30 MHz.

Tunes any antenna

Tunes out SWR on dipoles, verticals, inverted vees, random wires, beams, mobile whips . . . nearly anything! Use coax, random wire or balanced lines. Has heavy duty 4:1 balun.

Custom inductor switch

The inductor switch is the most likely component to burn up in *any* antenna tuner.

MFJ's inductor switch in the MFJ-949E was *custom* designed to withstand the extremely high RF voltages and currents that are developed in your tuner.

8-Position Antenna switch

lets you select two coax fed antennas, random wire/balanced line or built-in dummy load through your MFJ-949E or direct to your transceiver.

Big Lighted Cross-Needle Meter

Has MFJ's *full size* 3 inch lighted cross-needle Meter. Lets you easily read SWR, true *peak* forward and average reflected power simultaneously on 300 Watt or 30 Watt ranges. Lamp has on/off switch, requires 12 VDC or 110 VAC with MFJ-1312D, $14.95.

QRM-Free PreTune™

MFJ's *QRM-Free PreTune*™ lets you pre-tune your MFJ-949E *off-the-air* into its built-in dummy load! Makes tuning your actual antenna faster and easier.

Plus Much More!

Full size built-in non-inductive 50 Ohm dummy load, scratch-proof Lexan multi-colored front panel, superior cabinet and construction and more! Measures a sleek and compact 10⅝x3½x7 inches.

MFJ-948 -- An Econo MFJ-949E for Only $129.95!

MFJ-948
$129.95
Ship Code B

All the features of the MFJ-949E -- the world's leading 300 Watt antenna tuner -- for an *incredibly low $129.95!* (Dummy load not included; coax connector for one on rear panel.)

Features include custom designed inductor switch, 1000 volt tuning capacitors, *full size* 3 inch lighted Cross-Needle meter, 8 position antenna switch, heavy duty 4:1 balun, full 1.8 to 30 MHz operation, MFJ's famous *No Matter What*™ one year limited warranty. Measures a slim and compact 10½x3½x7 inches.

MFJ Compact Mobile HF Antenna Tuner

Covers HF and 6 Meters, Handles 300 watts, Has Antenna Bypass Switch

The compact MFJ-945E mobile antenna tuner covers 6 Meters and HF (1.8- 60 MHz), handles 300 PEP watts, and tunes coaxial cable-fed antennas, plus random wires.

Don't leave home without this mobile tuner, and have a a better trip as the MFJ-945E extends antenna bandwidth and eliminates the need to stop, go outside, and readjust your mobile antenna.

The frustratingly narrow bandwidth of mobile antennas can be greatly broadened with this tuner.

Of course, this diminutive tuner can be used to tune coax-fed home station antennas of all kinds, too, as well as random wires.

The cross needle meter shows SWR, forward, and reflected power -- at a glance.

It reads forward/reflected power in 300/60 and 30/6 watt ranges.

MFJ-945E
$109.95
Ship Code B

The ON/ OFF lamp switch is handy for changing light conditions in your vehicle; the meter lamp is 12 VDC powered (**MFJ-1312D**, $14.95).

Large, conveniently-placed controls make tuning fast and easy.

The bypass switch lets you bypass the tuner (connecting your antenna and transmitter directly) while still using its SWR/wattmeter.

The back panel has SO-239 coaxial connectors for your transmitter and antenna feedline and a wing nut post for your ground.

For at-home use with a random wire a standard banana plug fits neatly into the antenna jack.

An efficient airwound inductor gives you lower losses for more watts output.

The small, 8Wx2Hx6D inch black aluminum cabinet takes up little space.

A mobile mounting bracket, **MFJ-20**, is $4.95. Add $2.00 shipping for the bracket if ordered separately.

Has MFJ's One Year *No Matter What*™ limited warranty.

Portable Tuner for QRP to Full-bore Transceiver

The MFJ-971 is a tiny, inexpensive portable 200 watt PEP antenna tuner that's a perfect match for today's ultra-compact HF transceivers while offering features especially designed for the QRP operator.

Covering 1.8 to 30 MHz, this T-match tuner can match coax-fed antennas, as well as those fed with balanced feedline, and random wires. A 4:1 toroid balun is built in for balanced lines.

MFJ-971
$99.95
Ship Code A

From the factory, the MFJ-971 offers forward power readings of 30 watts maximum or 300 watts, on its cross needle meter. You can monitor forward power, reflected power, and SWR simultaneously. For dedicated QRP operation, swapping of a jumper plug internally converts the maximum forward reading on the meter to 6 watts.

The meter lamp may be powered by an external 12 VDC source if you desire **(MFJ-1312D**, $14.95).

The MFJ-971, while an all-around low-power tuner, is especially suited for MFJ transceivers and power packs. It matches them in size and styling and brackets included with the tuner allow connecting the units together physically into an attractive and compact package.

As in all good antenna tuners, three controls give flexibility in matching: Inductance (12 positions), Transmitter, and Antenna. Once you find the proper setting on each band, just record it for future "instant band changing."

Rear panel includes SO-239 coaxial jacks for transmitter and antenna; 2 sturdy binding posts for balanced line; another binding post for a random wire; ground post; 12 VDC input jack for meter lamp; and low/high power meter range switch.

The MFJ-971 is backed by MFJ's *No Matter What*™ warranty.

Measures a tiny 6X6X2.5 inches.

MFJ 300-Watt *Super Value* Versa Tuner Covers 160-10 Meters

It's not just a tuner, it's an 8-position antenna switch.

The photo tells the story: you can select among two coaxial-fed antennas, a balanced line (4:1 toroid balun included) or random wire or an external dummy load, and for each you can select "direct" (bypassing the tuner) or "tuned."

This tuner is rated at 200 watts and can match dipoles, vees, random wires, and balanced and coax feedlines, from 1.8 to 30 MHz. You get a lighted cross needle SWR/wattmeter with on/off switch (lamp uses 12 VDC or 110 VAC with **MFJ-1312D**, $14.95).

MFJ-941E
$119.95
Ship Code B

The meter shows SWR, and forward and reflected power in 300/60 and 30/6 watt ranges selected at the front panel.

An efficient 12 position airwound inductor gives low losses for more power out. Uses 1000 Volt capacitors.

The aluminum cabinet has a durable scratch-proof multi-color Lexan front panel to complement your rig and fits right into your station.

Measures a sleek, compact 10⅝Wx2⅞Hx7D inches.

MFJ's Smallest VERSA TUNER

MFJ-901B
$79.95
Ship Code A

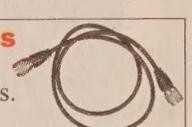
MFJ's smallest (5x2½x6) and most affordable 200 Watt PEP VERSA TUNER. Match dipoles, vees, random wires, verticals, mobile whips, beams, balanced and coax lines continuously from 1.8-30 MHz. A 4:1 balun for balanced lines is built into this MFJ-901B tuner. Three adjustment controls for maximum matching capability.

Random Wire Tuner for HF

MFJ-16010
$49.95
Ship Code A

Operate all bands 1.8-30 MHz -- anywhere with any transceiver -- using a single random wire and MFJ's *Random Wire Tuner*. Small enough to carry in your hip pocket. Handles 200 watts output. Matches high or low impedance loads by interchanging input and output, so it uses SO-239 connectors for both. Measures a super compact 2.25H X 3.5W X 5.25D inches.

Pre-made Coax Patch Cables



Molded, weather resistant 50-ohm coax patch cables with PL-259 connectors. Heavy rubber boots protect bend points.

length	RG-58	Price	RG-8X	Price	RG-213 (H)	Price
3 ft.	MFJ-5803	$5.95	MFJ-5803X	$9.95	MFJ-5803H	$10.95
6 ft.	**MFJ-5806**	**9.95**	**MFJ-5806X**	**11.95**	**MFJ-5806H**	**12.95**
9 ft.	MFJ-5809	11.95	MFJ-5809X	13.95	--	--
12 ft.	**MFJ-5812**	**12.95**	**MFJ-5812X**	**14.95**	--	--
18 ft.	MFJ-5818	14.95	MFJ-5818X	16.95	MFJ-5818H	19.95
50 ft.	**MFJ-5850**	**24.95**	--	--	**MFJ-5850H**	**49.95**
100 ft.	MFJ-58100	39.95	--	--	MFJ-58100H	79.95

MFJ tiny Travel Tuners

Tiny 4½x2¼x3 inch tuner handles full 150 Watts! Covers 80-10 Meters, has tuner bypass switch, tunes nearly anything!

MFJ brings you the world's smallest full power 150 Watt 80-10 Meter Antenna Tuner. Extra wide matching range lets you tune nearly any antenna.

It's no toy, its got guts! Built with real *air* variable capacitors (600 Volt, 322 pF) and *three* stacked powder iron toroids to handle real power -- not just QRP. Bypass switch lets you bypass tuner when you don't need it.

You can use nearly any transceiver at full power with nearly any coax fed or random wire antenna for portable, home or mobile operation.

It's perfect for compact rigs like Icom IC-706MKIIG, Yaesu FT-100D, Kenwood TS-50, QRP rigs and others with a built-in SWR meter.

Operate anywhere, anytime with a quick easy set-up! Tune out SWR on your mobile whip from inside your car. Operate in your apartment with a wall-to-wall antenna or from a motel room with a wire dropped from a window or from a mountain top with a wire over a tree limb. Great for DXpeditions or field day. Be prepared for emergencies.

MFJ-902 is so small and handy, you'll rely on it wherever you go! It's easy to pack away in your briefcase, suitcase, backpack, glove compartment or desk drawer.

It's tiny enough to slide in your back hip pocket! 4½Wx2¼Hx2¾D inches.

MFJ-902
$79.95
Ship Code A

New!

New! Tiny Travel Tuner with 4:1 Balun

MFJ-902H
$99.95
Ship Code A

MFJ-902H, same as MFJ-902 *Tiny Travel Tuner* but has *4:1 balun* for balanced lines and binding post connections for balanced lines and random wire. 5 ¾Wx2¼Hx2 ¾D inches.

New! Tiny Travel Tuner with Cross-Needle SWR/Wattmeter

MFJ-904, Same as MFJ-902 *Tiny Travel Tuner* but has *Cross-Needle SWR/Watt meter* that shows SWR, forward and reflected power all at a glance. Push button selects forward/reflected power in 300/60 and 30/6 Watt ranges. Measures 7 ¼ Hx2 ¼ Hx2 ¾ D inches.

MFJ-904
$109.95
Ship Code A

New! Tiny Travel Tuner with Cross-Needle SWR WattMeter and 4:1 Balun

MFJ-904H is the same as MFJ-902 Tiny Travel Tuner but has Cross-Needle SWR/Wattmeter and 4:1 balun for balanced lines with binding post connections for balanced lines and random wire. Cross-Needle meter shows SWR, forward and reflected power all at a glance. Push button selects forward or reflected power in 300/60 and 30/6 Watt ranges. Measures a compact 7 ¼Hx2¼Hx2¾D inches.

MFJ-904H
$129.95
Ship Code A

MFJ 6 Meter/VHF/UHF Antenna Tuners

MFJ 6 Meter Antenna Tuners

MFJ-906
$79.95
Ship code A

MFJ-906 6 Meter tuner. Low SWR with most any coax fed antenna. You'll get more power out of your transceiver and into your antenna for more DX. Lighted Cross-Needle SWR/Wattmeter shows SWR, forward, reflected power, 300/60 and 30/6 Watt ranges. Order MFJ-1312D, $14.95 for meter lamp. Built-in bypass switch, handles 100 Watts FM, 200 Watts SSB PEP. Works with solid state and tube rigs, 50-60 MHz. 8Wx2½Hx3D inches.

MFJ-903, $49.95. Like MFJ-906. Less meter/bypass switch. 5Wx2½Hx3D inches.

144/220 MHz or 440 MHz Tuner

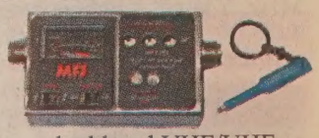
MFJ-921 Dual Band VHF tuner covers 2 Meters/220 MHz. Built-in SWR/Watt- meter measures SWR in 2 power ranges: 300 or 30 Watts. Meter is usable for both 144 MHz and 220 MHz bands. Low SWR with practically any antenna. Handles 200 Watts. Designed to match a wide range of impedances for both mobile/base operation. SO-239 input/output connectors, wing nut post ground. Black aluminum cabinet measures a compact 8x2½x3 inches -- fits just about anywhere.

MFJ-921/924
$69.95
Ship code A

MFJ-924, $69.95. 440 MHz band only.

Dual Band VHF/UHF Tuner

MFJ-922
$79.95
Ship code A



This compact dual band VHF/UHF antenna tuner has a single meter that reads SWR and power. No zero adjustment needed. It covers VHF from 136 to 175 MHz and UHF from 420 to 460 MHz. You can read power up to 150 Watts in 2 ranges: 60 Watts or 150 Watts. It's a great antenna tuner for HTs, mobile rigs or amplifiers up to 150 Watts. Its super-compact size lets you take it anywhere -- measures a tiny 4x2½x1¼ inches -- you can put it in your shirt pocket! Carry it with you in your car, camping trips, etc. Tuning tool included.

MFJ Balanced Line Antenna Tuner

Superb balance . . . Extremely wide matching range . . . Covers 1.8-54 MHz . . . Cross-Needle SWR Wattmeter . . . Handles 300 Watts . . . Compact size . . .

New!

MFJ-974H
$199.95
Ship Code D

The MFJ-974H is a *fully balanced* true balanced line antenna tuner. It gives you *superb* current balance throughout its very wide matching and frequency range.

Johnson Matchbox

For decades, the Johnson Matchbox has been the standard of comparison for balanced line tuners. But, it had a severely limited matching range and covered only 80, 40, 20, 15 and 10 Meters.

***The** MFJ-974H is its successor.* It meets today's needs and even surpasses the Johnson Matchbox outstanding performance.

Everything You Need

The MFJ-974H gives you excellent current balance, very wide matching range(12-2000 Ohms) and covers 1.8 through 54 MHz *continuously* including all WARC bands, 160 Meters, 6 Meters and the new 60 Meter band. Handles 300 Watts SSB PEP and 150 Watts CW.

Tuning is fast and easy - - just three tuning controls. You can even adjust for highly efficient broadband low-Q operation or use higher Q when you encounter extreme loads.

A large three-inch lighted Cross-Needle SWR/Wattmeter lets you read SWR, peak or average forward and reflected power *all at a glance* on 300 or 30 Watt ranges.

A ground post is provided to ground one output terminal so you can also tune random wires and coax fed antennas.

Compact 7½Wx6Hx8D inches fits anywhere.

Tunes any Balanced Line

The MFJ-974H tunes any balanced lines including 600 Ohm open wire line, 450/300 Ohm ladder lines, 300/72 Ohm twin lead - - shielded or unshielded.

Superb current balance minimizes feedline radiation that can cause troublesome TVI and RFI, painful RF bites, mysterious RF feedback problems and radiation pattern distortion.

Excellent Balance, Excellent Design

The MFJ-974H is a *fully balanced* wide range T-Network using four gear driven 1000-Volt air variable capacitors and high-Q air wound tapped inductor for 80-10 Meters and separate inductors for 6 and 160 Meters. The tuning components are mounted symmetrically to insure electrical balance.

A 1:1 current balun is placed on the low impedance 50 input side to convert the balanced T-Network to unbalanced operation. The balun is made of 50 ferrite beads on RG-303 Teflon™ coax to give exceptional and efficient isolation. It stays cool even at maximum power.

Balanced Line = Extremely Low Loss

Balanced lines give extremely low loss.

Doublet, horizontal loop, vertical loop, quad, double extended Zepp, Lazy H, W8JK antennas all give efficient multi-band operation when fed with balanced lines.

6-80 Meter Balanced Line Tuner

New!

MFJ-974
$179.95
Ship Code D

MFJ-974, $169.95. Same as MFJ-974H but for 6-80 Meter operation (no 160 Meters).

Antenna Accessories

MFJ-1777, $49.95. 102 feet all band doublet antenna covers 160-6 Meters with balanced line tuner. Super strong custom fiberglass center insulator provides stress relief for 450 Ohm ladder line (100 feet included). Authentic *glazed ceramic* end insulators. Handles 1500 Watts.

New!

MFJ-18H100, $14.95. 100 feet of quality 450 Ohm ladder line.

MFJ-18G100, $11.95. 100 feet of extremely strong heavy duty 7-strand, 14-gauge hard copper antenna wire.

MFJ-*16C06, $3.95.* *6 authentic* glazed ceramic end/center antenna insulators. Extra strong. Will not arc or melt.

***New!* MFJ-16D01, $6.95.** Super strong custom fiberglass stress relieving center insulator for 450 Ohm ladder line.

See page 43 for more antenna accessories.

Antenna Tuner/Artificial Ground

MFJ-934
$179.95
Ship Code B

MFJ-934 is unique because it has a built-in artificial ground. A ground matching knob lets you switch in inductance to bring an attached wire to a low impedance current point to form an artificial ground. A push button lets you use the Cross-Needle Meter to monitor for maximum ground current. With an artificial ground to work against, you'll be surprised to see how well a random wire can work.

You get a 300 Watt full featured, general purpose antenna tuner that covers 1.8-30 MHz. It has a two range, lighted Cross-Needle Meter that lets you read SWR, forward and reflected power all in a glance and a 4:1 balun for balanced lines. Plus, you get an efficient airwound inductor, special high current/voltage 12 position inductor switch and two 1000 volt air-variable capacitors. It tunes all types of antennas and feedlines including random wire, coax and balanced lines. 10⅝Wx3½Hx8D in.

MFJ Artificial RF Ground

Places your rig near earth ground potential!

MFJ-931
$89.95
Ship Code A

Create an artificial ground with this MFJ-931! It effectively places your rig near actual earth ground potential even if your rig is on the second floor or higher with no earth ground possible!

Also, it electrically places a far away RF ground at your rig.

How's your RF ground? Do you have RF "hot spots" that "bite" you when you transmit? Do you have RF feedback that causes your rig to quit working on some bands? Do you have TVI/RFI that makes your neighbors hard to live with? Do you get weak signal reports because of extreme ground losses or radiation pattern distortion?

These problems could be caused by poor RF grounding, especially if your rig is on a second floor with no ground at all. Even if you have a good ground, a long connection wire can ruin its effectiveness by isolating true RF ground from your rig.

New! 4 Foot Ground Rod

Durable four foot *copper bonded* steel earth ground rod is a tough 3/8 in. diameter that will last and last. Sharp pointed end makes it easy to drive into the ground.

MFJ-1934
$4.95
Ship Code B

Use it to tie your equipment to a single earth ground to help bleed off static and RFI and prevent RF hot spots. Use several to form a good RF ground for random, long wire and vertical antennas.

MFJ-931 Continued . . .

MFJ-931 creates an artificial ground! It resonates a random length of wire thrown along the floor and produces a tuned counterpoise. This artificial ground effectively places your rig near actual earth ground potential with no earth ground possible. Reduces the electrical length of the ground connection wire to virtually zero by tuning out its reactance. MFJ-931 connects between your rig and a random length of wire or a connecting ground wire. It's tuned for maximum ground current using the built-in RF ammeter. It covers 1.8 to 30 MHz and measures 7½x3½x7 inches in an RF tight all metal cabinet.

MFJ *GrandMaster*™ SWR/wattmeter Series

GrandMaster™ SWR/Power Meters are the Cadillacs of ham radio! If you will not settle for less than the best accuracy and precision these *GrandMasters*™ are for you.

You get a large 3¼x1¼ inch precision illuminated meter for easy wide-angle viewing. A highly visible black and red meter scale on a bright white background makes it quick and easy to read SWR, forward or reflected power. Lamp requires 13.8 VDC or 110 VAC operation.

A functional and simple front panel layout lets you select power ranges, bands or make SWR readings intuitively.

The *GrandMaster*™ series feature an SWR scale that extends the full view of the meter. 3:1 SWR is centered at mid-scale to give you precision, wide-range measurements.

All GrandMasters™ feature peak and average, forward and reflected power readings and have selectable power ranges.

Each *GrandMaster*™ is housed in an all metal cabinet with rubber feet and protected by durable speckled black paint. A designer injection molded grey front panel perfectly matches any transceiver. 7½Wx3⅜Hx4¼D inches.

Air dielectric SO-239 connectors with gold plated center pins gives superb performance to beyond 525 MHz.

GrandMasters™ are precisely factory calibrated for accurate measurments.

Choose from four MFJ GrandMasters™

MFJ-870, $134.95. HF, covers 1.6 to 60 MHz. 30, 300, 3000 Watt power ranges.

MFJ-872, $94.95. HF/VHF, covers 1.8 to 200 MHz. 5, 20, 200W power ranges.

MFJ-873, $114.95. VHF/UHF, covers 125-525 MHz. 5, 20, 200W power ranges.

MFJ-874, $169.95. HF/VHF/UHF, covers 1.8-525 MHz. 5, 20, 200W power ranges.

MFJ Compact HF, VHF, UHF SWR/wattmeters

MFJ-860 **$44.95** Ship Code A

MFJ-862 **$54.95** Ship Code A

MFJ-864 **$84.95** Ship Code A

This MFJ Cross-Needle SWR/wattmeter covers HF thru VHF -- 1.8-60 MHz, 144 MHz, and 440 MHz bands -- for only 84.95!

MFJ-864's *Cross-Needle* Meter reads forward and reflected power and SWR simultaneously and features separate HF and VHF/UHF directional couplers, each with its own SO-239 connectors.

This lets you connect your HF and VHF/UHF transceivers at the same time. You can then monitor SWR and power of either transceiver at the flick of a switch. Others have a single set of connectors -- you have to plug and unplug to use separate HF or VHF rigs.

Power ranges: 30/300 watts forward and 6/60 watts reflected. Each power range for each band is individually calibrated. Schottky diodes are used for best accuracy.

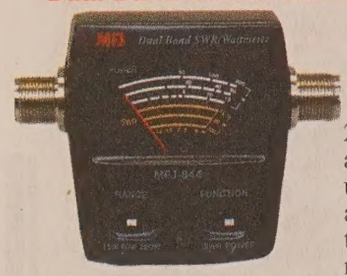
Single knob operation makes it easy to use and the meter is lighted for easy reading. Meter uses 12 VDC or 110 VAC with optional adapter, MFJ-1312D, $14.95.

The all metal cabinet has a tough vinyl cladding. You won't find a tougher, longer lasting finish anywhere. **MFJ-864** measures a compact 7¼ Wx2½Hx2¼D inches.

MFJ-862, similar to MFJ-864 but covers 144/220/440 MHz. 30/300 Watts forward, 6/60 Watts reflected ranges. 5¾x2½x2¼ inches. Has one sensor for all three bands.

MFJ-860, similar to MFJ-864 but for 1.8-60 MHz only. Push button selects 30/300 Watts forward, 6/60 Watts reflected. Compact 4½x2¼x3 inches.

Dual-Band Mobile SWR/Wattmeter



MFJ-844 **$69.95** Ship Code A

Handles 200 watts and measures SWR and power in three power ranges: 15, 60, and 200 watts. Multi-colored meter makes for easy reading and is extra large.

Covers 144 and 440 MHz. Insertion loss is 0.3 dB or lower with 50 Ohm impedance. SO-239 connectors. Compact 3.75Wx3Hx1.25 D inches. Die-cast metal with quality connectors.

Large-Meter SWR/Wattmeter

MFJ-815B **$79.95** Ship Code A

MFJ-815B covers 1.8-60 MHz. 3-inch Cross-Needle meter reads SWR and peak/average for forward and reflected power. Power ranges: 200/2000 watts forward and 50/500 watts reflected. SWR from 1:1 to 8:1. SO-239 connectors. 7¼x4½x3½ inches. Black aluminum cabinet.

MFJ-817, $89.95. Similar to MFJ-815B but for VHF/UHF. Reads SWR and peak/average for forward and reflected power in 2 ranges: 200/20 and 50/5 watts.

Most Popular Econo Meters

Covers 144 and 220 MHz. Reads forward and reflected power in 2 ranges -- 30 or 300 watts. Reads SWR from 14-220 MHz and relative field strength from 1 to 220 MHz. Binding post for field strength antenna, 2-color meter. 4½x2¼x3 in.

MFJ-812B **$34.95** Ship Code A

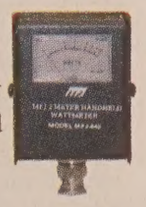
MFJ-816, similar to MFJ-812B but for HF. Two scales--30/300 watts. SWR from 1.8-30 MHz. Toroid current pickup gives uniform sensitivity. 2-color meter scale.

MFJ-816 **$34.95** Ship Code A

SWR/Wattmeters for Handhelds

MFJ-840 checks the power output of your 2 Meter handheld into a 50 ohm dummy load and check battery charge,too. BNC connector, small 2x2¼x1½ in.

MFJ-840 **$19.95** Ship Code A

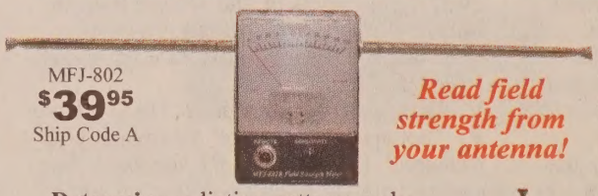


MFJ-841 connects directly in line between HT and antenna. Reads SWR up to 6:1 and power output to a full 5 watts. 3-position toggle switch selects SWR, SWR set, or forward power. Compact 2x2¼x1½ in.

MFJ-841 **$39.95** Ship Code A

Versatile, Easy-to-Use MFJ Antenna Field Strength Meters

MFJ-802 **$39.95** Ship Code A



Read field strength from your antenna!

Determine radiation pattern; make changes to your antenna and see if it radiates better or worse. Adjust a ground lead, artificial ground, counterpoise or tune your transmitter or antenna tuner for maximum field strength. Check for floating RF. Use from 100 KHz to 500 MHz.

MFJ-802, $39.95. Telescoping 40-in. *dipole*. Big 3-in. meter. Sensitivity control reduces influence of surrounding objects. Jack for MFJ-802R remote RF sensing head. 2⅝Wx4Hx1½D inches.

MFJ-802R, $24.95. Read your field strength remotely where you can control your transmitter or rotate your beam. Requires shielded two conductor cable (not incl.). 2⅜Wx3⅝Hx1D inches.

MFJ-802X, $59.90, MFJ-802 field strength meter and MFJ-802R, remote sensor combination.

MFJ-801, $19.95. General purpose field strength meter. 1¾ inch meter. Sensitivity control. 20 inch (extended) monopole. Finger contact on side increases sensitivity when needed. 2⅜x3⅝ x1 inches.

MFJ UHF/VHF/HF Dummy Loads

MFJ VersaLoad™ kW Dummy Load

MFJ-250X

VersaLoad™ KW dummy load lets you tune up fast! Run 1KW CW or 2 KW PEP for 10 minutes. Run 1/2 KW CW or 1 KW PEP for 20 minutes.

MFJ-250X
$39.95
Ship Code B

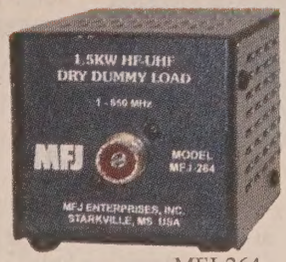
Run continuous duty with 200 Watts CW or 400 watts PEP. Complete with derating curve. Quality 50 ohm non-inductive resistor. Use transformer oil (not included).

Low VSWR to 400 MHz. Under 1.2:1 to 30 MHz. 1.5:1 for 30-300 MHz. 2:1 for 300-400 MHz.

Ideal for testing HF and VHF rigs. Has SO-239 connector and vented for safety. Removable vent cap. Carrying handle. 7½ inches high by 6⅝ diameter.

MFJ-250, $59.95. Includes transformer oil (no PCB). Ship Code D.

Dry 1.5 kW UHF/VHF/HF Load



This is ham radio's most versatile 50 ohm dummy load.

It does it all -- works with all radios from 160 Meters through 650 MHz and from QRP to the full 1500 watt legal limit.

MFJ-264
$69.95
Ship Code A

You get SWR below 1.3 to 650 MHz and below 1.1 at 30 MHz.

Handles 100 watts for 10 minutes, 1500 Watts for 10 seconds.

Strong lightweight aluminum construction. 3Wx3Hx9D inches.

Comes with MFJ's famous *No Matter What*™ one year limited warranty.

MFJ-264N, $79.95. Similar to MFJ-264 but with type "N" connector.

Dry 300 Watt VHF/HF Dummy Load

Air cooled, non-inductive resistor in a perforated metal housing;

SO-239 connector.

Full load for 30 seconds. Silk-screened derating curve to 5 minutes. Handles 300 Watts. SWR below 1.1:1 to 30 MHz, 1.5:1 from 30 to 650 MHz. A super compact 2¼x2¼x7".

MFJ-260C
$34.95
Ship Code A

MFJ-260CN, $39.95. Similar to MFJ-260C but with type "N" connector.

Coax Patch Cable

MFJ-5803, $5.95. 3 foot coaxial line with PL-259 connectors. Shipping code A

Industrial Grade Transformer Oil

MFJ-21, $24.95. 1 gal. industrial grade transformer oil, (no PCB). Ship Code C.

MFJ Dry Dummy Load with Precision SWR/Wattmeter

World's most versatile 1.5 kW dummy load has a built-in true peak reading SWR/Wattmeter that you can use independently.

Tune up your transceiver, linear amplifier or antenna tuner into a safe 50-ohm dummy load at *full power*. Then instantly switch to your antenna and monitor SWR, forward and reflected power.

Test/tune transmitters, amplifiers, antenna tuners, baluns, transformers, filters, matching networks, coax, stubs, transmission lines, antennas.

MFJ-267
$149.95
Ship Code B

The 50-ohm dry dummy load works DC to 60 MHz. SWR is below 1.3:1 at 30 MHz. Can handle 100 watts for 10 minutes or 1500 watts for 10 seconds. Comes with power derating curve.

Extra-large three-inch lighted Cross Needle meter reads SWR (1:1 to 8:1), and forward and reflected power sumultaneously.

Reads true peak PEP or average power on 300/3000W forward and 60/600W reflected power ranges, 1.8 to 54 MHz.

High accuracy comes from a carefully designed directional coupler, an accurate active-peak reading circuit, and a precision d'Arsonval meter movement.

Measures 4¹/₁₀Wx3⅛Hx10D in. RF tight. Uses 12 VDC or 120 VAC with **MFJ-1312D, $14.95.**

Reduce Harmonics, Avoid TVI with MFJ Filters

Low Pass TVI Filter Handles Full Legal Power

MFJ-704
$49.95
Ship Code A

MFJ-704 suppresses TVI, RFI, telephone and other interference by reducing unwanted harmonics going to your antenna.

At the same time your HF signal passes on through with low loss so you can snag that rare and exciting DX!

If your harmonics are causing TVI problems, an MFJ-704 can keep your neighbors happy while you have fun with ham radio!

Nine Chebyshev poles, MFJ's exclusive *TeflonDielectric Technology*™ capacitors, Hi-Q inductors, ground plane shielding and an RF tight cabinet give you excellent TVI and RFI protection.

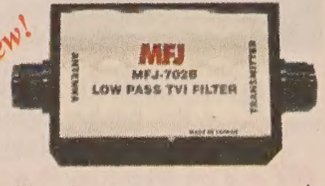
These exclusive *Teflon Dielectric Technology*™ capacitors give you extremely low loss and eliminate voltage breakdown and capacitor heating -- even at full legal power with a 2:1 SWR load!

Handles full legal power from 1.8-30 MHz. SWR below 1.3 to 30 MHz into 50 Ohms. Attenuates above 40 MHz.

Measures a compact 3x3x9 inches. Handy mounting tabs.

200W Low Pass TVI Filter

MFJ-702B
$29.95
New!
Ship Code A



Be a good neighbor. Plug this Low Pass TVI filter be-tween your transmitter and antenna or tuner and reduce your transmitter harmonics by 50 dB! Harmonics could be the source of interference to your neighbor's TV, radio, VCR, telephone, etc. SWR is below 1.5 to 30 MHz into 50 Ohms. Perfect for barefoot transceivers -- handles 200 Watts with less than 0.5 dB insertion loss. Attenuation is 50 dB at 54 MHz. SO-239 connectors. 3x2x1.5 inches.

High Pass Filter for TV sets

MFJ-711B
$24.95
Ship Code A

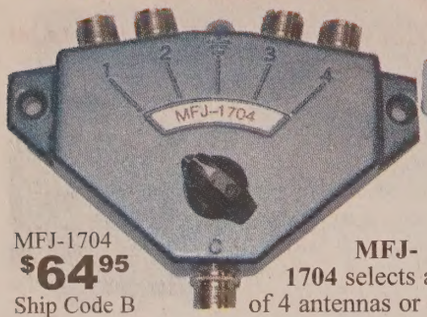
MFJ-711B, $24.95. MFJ's *ShieldBreaker*™ high pass filter effectively suppresses annoying TVI! Wipe out TVI caused by two- way, broadcast, commercial, amateur and CB radios operating below 30 MHz. Use between cable/antenna and TV/VCR. 75 ohm cable.Type F male/female connectors.

MFJ RFI Free Choke Kit for RFI Suppression

MFJ-701
(Set of 4)
$14.95
Ship Code A

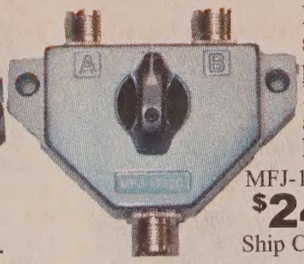
It's easy to eliminate common RFI problems. Simply wind the offending cable around MFJ's RFI suppressing toroid to get rid of RFI. Four square ferrite toroids are formulated especially for eliminating RFI from 0.5 to 200 MHz. Wind on all kinds of cable, computer ribbon, TV coax, power, telephone, etc.

Lightning Protected Heavy Duty Coax Switches



MFJ-1704
$64.95
Ship Code B

MFJ-1704 selects any of 4 antennas or center ground position.



MFJ-1702C
$24.95
Ship Code A

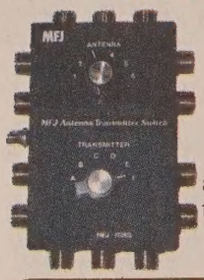
Replaceable lightning surge protector helps protect against distant lightning induced surges and static. Handles 2.5 kW PEP. Extremely low SWR. Isolation better than 50 dB at 30 MHz and better than 50 dB at 500 MHz. Negligible insertion loss. 50 Ohms. Mounting holes.

MFJ-1704N, $74.95. "N" connectors.

MFJ-1702C 2-position coax switch has a center ground position and lightning surge protection! 50 dB at 450 MHz. 50 Ohm. Unused terminal is automatically grounded. Less than 0.2 dB insertion loss and SWR below 1.2:1. Heavy duty cavity type construction. SO-239 connectors. Mounting holes. 3x2x2 inches. **MFJ-1702CN, $34.95.** Type N. DC-1.1 GHZ.

MFJ-1702, $19.95. SO-239, less lightning protection and no center position.

MFJ Six Position Antenna/Transceiver Switch



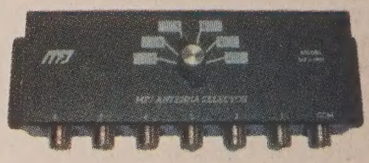
New and Improved!

MFJ-1700C
$99.95
Ship Code B

The new MFJ-1700C adds lightning surge protection, better isolation. **High** power Antenna/Transceiver Switch lets you select one of six antennas and one of six different transceivers in any combination.

You can plug in an antenna tuner, meter, etc., so it is always connected to the antenna and radio selected. 2 kW PEP. 50-75 Ohm loads. Unused terminals are automatically grounded. SO-239 connectors. 1.8 to 30 MHz. Measures 10x3x1½ inches.

6 Position HF Antenna Switch



MFJ-1701
$59.95
Ship Code B

Select one of six antennas from 1.8-30 MHz. Unused terminals are grounded. SO-239 connectors. Handles 2 kW PEP, 1 kW CW. 50-75 Ohm loads.

MFJ Lightning Surge Protectors handle 400 Watts PEP or 1500 Watts PEP

MFJ-270
$29.95
Ship Code A

Safeguard your expensive equipment from static electricity and lightning induced surges on 50 Ohm coax.

MFJ's *Guardian Angel*™ Lightning Surge Protectors has an *Ultra-fast* gas discharge tube that safely shunts up to 5000 amps of peak impulse current harmlessly to an independent ground. SWR less than 1.1:1. Less than 0.1 dB loss. Use up to 1000 MHz. MFJ-270 handles 400 W PEP. MFJ-272 handles 1.5 kW PEP. MFJ-270 and MFJ-272 *do not* protect against a direct lightning hit.

MFJ-270, $29.95. SO-239 to SO-239.

MFJ-270MF, $34.95. SO-239 to PL-259.

MFJ-270N, $34.95. Low-loss N-connectors.

MFJ-97, $9.95. Replacement gas discharge tube for MFJ-270.

MFJ-272
$39.95
Ship Code A

MFJ-272MF pictured.

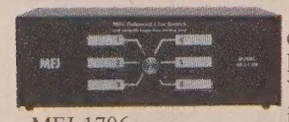
MFJ-272, $39.95. SO-239-SO-239.

MFJ-272N, $44.95. N Connectors.

MFJ-272MF, $44.95. SO-239 to PL-259.

MFJ-97H, $19.95. Replacement Gas Discharge tube for MFJ-272.

Balanced Line Antenna Switch



MFJ-1706
$89.95
Ship Code B

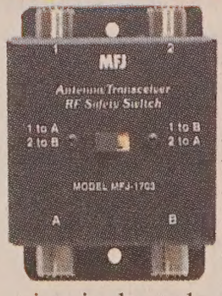
Use 1 of 6 different balanced feedlines, 1.8-30 MHz. Versatile 5-way binding posts. Handles 1.5 kW. **MFJ-1706H, $99.95,** similar, but has high-voltage glazed ceramic feedthrough insulators.

MFJ-214 Tuning Pulser . . . $49.95

Pulse tuning safely tunes up your amp to full power and best linearity. Keeps average power to safe level to prevent overheating, tube damage, power supply stress and component failure.

MFJ-216, $59.95. Similar, but adds variable pulser & delay.

Rig/Antenna RF Safety Switch



MFJ-1703
$19.95
Ship Code A

MFJ-1703 keeps your expensive transceivers safe from transmitting into nothing! No more burning up your radio because you forgot to change your antenna switch! 1.8 to 30 MHz. Your transceiver is always hooked up to one of two antennas! Connect two rigs and two antennas and switch to different combinations. 300 watts PEP SSB, 150 watts CW. Handy mounting tabs. All metal, switches 50-75 Ohm unbalanced lines.

MFJ RF Sense T/R Switch

MFJ-1708
$69.95
Ship Code A

Automatic T/R Switch senses transmitted RF and switches your antenna from receive to transmit using a relay. Shorts your receiver antenna input to ground to protect your receiver. Provides an auxiliary contact closure to ground during receive (opened in transmit) for an "On-Air" sign or other use. Instead of using RF sense to switch the antenna, a control line input lets your key/keyer or PTT line switch the antenna. Adjustable time delay circuit gives you delayed switching. All modes. 200 Watts SSB PEP. Measures 4Wx2⅝Hx1½D inches. 12 VDC or 110 VAC with MFJ-1312D, $14.95.

Tune-Up *Matchmaker*™

MFJ-212
$79.95
Ship Code A

Tune up your antenna tuner for 1:1 SWR without transmitting! Avoids overheating/arcing caused by high SWR and long tune-ups. Automatic T/R switch bypasses MFJ-212 to prevent damage. Handles 300 Watts. Works with all radios, covers 160 through 6 meters. 3⅓x1¼x4 in. Use MFJ-1312D, $14.95.

AutoTuner *Extender*™

MFJ-914
$59.95
Ship Code A

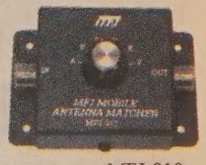
Does your rig's automatic tuner have limited matching range? MFJ-914 transforms your antenna impedance by as much as 10 times! Puts nearly any antenna into the range of your automatic or manual tuner. Covers 160-10 Meters, handles 300 Watts, has bypass position.

MFJ W9INN Balun Box

MFJ-912
$49.95
Ship Code A

Converts unbalanced coaxial line to balanced ladder transmission line. Has a *GIANT* 2-core 4:1 balun wound with *Teflon*® wire. Compact 3¼x2¼x7 inches. Heavy duty ceramic feed-through insulators. Handles full legal limit. SO-239 connector. Ground post, mounting holes.

Mobile Antenna Matcher



MFJ-910
$19.95
Ship Code A

Matches HF mobile antennas 10 through 80 Meters. Get more power into your HF mobile antenna! Measures a tiny 2½x2½x1½ inches -- so it will easily fit into your automobile's glove compartment.

MFJ 1.8-170 MHz SWR Analyzer™

Reads complex impedance . . . Super easy-to-use

MFJ-259B reads SWR . . . Complex RF Impedance: Resistance (R) and Reactance (X) or Magnitude (Z) and Phase (degrees) . . . Coax cable loss (dB) . . . Coax cable length and Distance to fault . . .Return Loss . . . Reflection Coefficient . . . Inductance . . . Capacitance . . . Battery Voltage. LCD digital read-out . . . covers 1.8-170 MHz . . . frequency counter . . . side-by-side meters . . . Ni-Cad/Ni-MH charger circuit . . . battery saver . . . low battery warning . . . smooth reduction drive tuning . . . much more . . .

The world's most popular SWR analyzer just got incredibly better and gives you more value than ever!

MFJ-259B gives you a complete picture of your antenna's performance. You can read antenna SWR and Complex Impedance 1.8 to 170 MHz.

Read Complex Impedance as series resistance and reactance (R+jX) or as magnitude (Z) and phase (degrees).

You can determine velocity factor, coax cable loss in dB, length of coax and distance to a short or open in feet.

You can read SWR, return loss and reflection coefficient at any frequency MFJ-259B simultaneously at a single glance.

$259.95 Ship Code A

Also read inductance in uH and capacitance in pF at RF frequencies.

Large easy-to-read two line LCD screen and side-by-side meters clearly display your information.

Built-in frequency counter, Ni-Cad charger circuit, battery saver, low battery warning and smooth re-duction drive tuning and much more.

Super easy to use! Just set the bandswitch and tune the dial -- just like your transceiver. SWR and Complex Impedance are displayed instantly!

Here's what you can do

Find your antenna's true resonant frequency. Trim dipoles and verticals.

Adjust your Yagi, quad, loop and other antennas, change antenna spacing and height and watch SWR, resistance and reactance change instantly. You'll know exactly what to do by simply watching the display.

Perfectly tune critical HF mobile antennas in seconds for super DX -- without subjecting your transceiver to high SWR.

Measure your antenna's 2:1 SWR bandwidth on one band, or analyze multiband performance from 1.8 to 170 MHz!

Check SWR outside the ham bands without violating FCC rules.

Take the guesswork out of building and adjusting matching networks and baluns.

Measure distance in feet to a short or open in faulty coax. Measure length of a roll of coax, coax loss, velocity factor, impedance.

Measure inductance and capacitance. Measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.

Adjust your antenna tuner for a perfect 1:1 match without creating QRM.

And this is only the beginning! The MFJ-259B is a complete ham radio test station including -- frequency counter, RF signal generator, *SWR Analyzer*™, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance/ Inductance Meter and more!

Take it anywhere

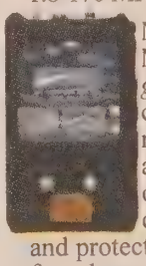
Fully portable, take it anywhere -- remote sites, up towers, on DX-peditions. Use 10 AA or Ni-Cad batteries (not included) or 110 VAC with MFJ-1312D, $14.95. Rugged all metal cabinet is only 4x2x6¾".

How good is the MFJ-259B?

MFJ *SWR Analyzers*™ work so good, many antenna manufacturers use them in their lab and on the production line -- saving thousands of dollars in instrumentation costs! Used worldwide by professionals everywhere.

SWR Analyzer Accessories

MFJ-66, $19.95. Plug these MFJ dip meter coupling coils into an MFJ *SWR Analyzer*™ and turn it into a sensitive and accurate *band switched* dip meter. Set of two coils cover 1.8-170 MHz depending on *SWR Analyzer*™.

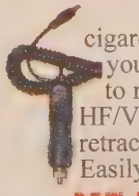


MFJ-29C, $24.95. Tote your MFJ-259B anywhere with this *genuine* MFJ custom carrying case. Has back pocket with security cover for carrying dip coils, adaptors and accessories. Made of special foam-filled fabric, it cushions blows, deflects scrapes, and protects knobs, meters and displays from harm. Clear protective window for display and cutouts for knobs and connectors. *Authentic MFJ logo!*

MFJ-99, $54.85. Carrying pouch, dip coil adapters and power supply.

MFJ-99B, $77.85. *Deluxe Accessory Pack* has 10 Ni-MH batteries, power supply, pouch and dip coils. ***Save $7!***

MFJ-92AA10, $24.95. 10-pack MFJ NiMH AA rechargeable batteries.

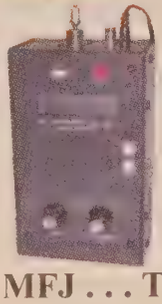


MFJ-5510, $6.95. ***New!*** 12 VDC cigarette lighter adapter lets you use your MFJ SWR Analyzer *on-the-road* to make quick adjustments to your HF/VHF/UHF mobile antennas! 18" retracted curly cord, 60" fully stretched. Easily fits in glove compartment.

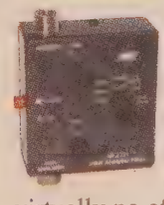
MFJ-249B SWR Analyzer™

Save a few bucks! Like MFJ-259B, but less analog meters. Reads SWR, true impedance magnitude and frequency only on LCD module. Has charging circuit, can use MFJ-259B accessories.

MFJ-249B **$239.95** Ship Code A



Tunable Analyzer Filter



MFJ-731 **$89.95** Ship Code A

Exclusive MFJ tunable RF filter allows accurate MFJ SWR and impedance measurements between 1.8-30 MHz in presence of strong RF fields. Has virtually no effect on measurements by the analyzer. Works with all SWR Analyzers.

MFJ-209 SWR Analyzer™

MFJ *Starter* SWR Analyzer™ lets you read SWR quickly only on a single analog meter. Tune knob, frequency control switch. No LCD module, counter or charging circuit.

MFJ-209 **$139.95** Ship Code A

1.8-170 MHz plus 415-470 MHz HF/VHF/UHF SWR Analyzer

Covers 1.8-170 MHz and 415-470 MHz . . . SWR . . . Complex RF Impedance: Resistance(R) and Reactance(X) or Magnitude(Z) and Phase(degrees) . . . Coax cable loss(dB) . . . Coax cable length and Distance to fault . . . Return Loss . . . Reflection Coefficient . . . Inductance . . . Capacitance . . . Battery Voltage. LCD digital readout . . . frequency counter . . . side-by-side meters . . . Ni-MH/ Ni-Cad charger circuit . . . battery saver . . . low battery warning . . . smooth reduction drive . . .

MFJ-269
$359.95

MFJ-269 covers 1.8 to 170 MHz *and* 415 to 470 MHz *-- an MFJ-269 exclusive!* It includes all the features of the MFJ-259B, *the world's most popular SWR Analyzer* plus much more!

Large easy-to-read two line LCD display and side-by-side meters clearly display your information.

Built-in Ni-Cad/Ni-MH charger circuit, battery saver, low battery warning, smooth reduction drive tuning. Use as signal source for testing/alignment.

Built-in *CoaxCalculator*™ -- calculates coax line length in feet given coax length in electrical degrees and vice versa for any frequency and any velocity factor (great for building matching sections and phasing lines) *-- an MFJ-269 exclusive!*

New 12-bit A/D converter gives much better accuracy and resolution than common 8-bit A/D converters *-- an MFJ-269 exclusive!*

Super easy to use! Just set the bandswitch and tune the dial -- just like your transceiver.

1.8 to 170 MHz Range Features

MFJ-269 gives you a complete picture of your antenna. Read antenna SWR and Complex Imped-ance 1.8 to 170 MHz. Built-in frequency counter.

Read Complex Impedance as series equivalent resistance and reactance (Rs+jXs) or as magnitude (Z) and phase (degrees).

Also reads parallel equivalent resistance and reactance (Rp+jXp) *-- an MFJ-269 exclusive!*

You can determine velocity factor, coax loss in dB, length of coax and distance to short or open in feet.

You can read SWR, return loss and reflection coefficient at any frequency simultaneously at a single glance. Also reads match efficiency.

Also read inductance in uH and capacitance in pF at RF frequencies.

You can measure SWR and loss of coax with *any* characteristic impedance from 10

to over 600 Ohms, including 50, 51, 52, 53, 73, 75, 93, 95, 300, 450 Ohms *-- an MFJ-269 exclusive!* **For** more information see MFJ-259B, page 11.

415 to 470 MHz Range features

Just plug in your UHF antenna coax, set the frequency and read SWR, return loss and reflection coefficient simultaneously. You can read coax cable loss in dB and match efficiency.

You can adjust UHF dipoles, verticals, yagis, quads and other antennas and determine their SWR, resonant frequency and bandwidth.

You can test and tune stubs and coax lines. You can manually determine velocity factor and impedances of transmission lines.

Adjust and test RF matching networks and RF amplifiers without applying power.

Has easy-to-read LCD *logarithmic* SWR bargraph and SWR meter for quick tuning.

Take it anywhere

Fully portable, take it anywhere -- remote sites, up towers, on DX-peditions. Built-in "N" connector. *Free* N-to-SO-239 adaptor. Use 10 AA Ni-MH or Ni-Cad or alkaline batteries (not incl.) or 110VAC with MFJ-1312D, $14.95. Measures 4Wx2Dx6¾H inches.

MFJ-269 SWR Analyzer Accessories

MFJ-39C, $24.95. Tote your MFJ-269 anywhere with this *genuine* MFJ custom carrying case. Back pocket with security cover for carrying dip coils, adaptors and accessories. A special foam-filled fabric cushions blows, deflects scrapes, and protects knobs, meters and displays from harm. Wear it around your waist, over your shoulder, or clip it onto the tower while you work -- the fully-adjustable webbed-fabric carrying strap has snap hooks on both ends.

Has clear protective window for frequency display and cutouts for knobs and connectors -- use your MFJ *Analyzer*™ without ever taking it out of your case.

MFJ-269 SWR Analyzer Accessories

MFJ-99C, $34.95. *SWR Analyzer Power Pack*. 10-Pack *SuperCell*™ Ni-MH batteries, & MFJ-1312D Power supply for MFJ-259B/MFJ-269 analyzers. ***Save $5!***

MFJ-98, $54.85. *MFJ-269 Accessory Pack*. Same as MFJ-99 but has MFJ-39 *custom* Carrying Pouch for MFJ-269. With power supply, dip coils. ***Save $5!***

MFJ-98B, $77.85. *MFJ-269* complete accessory pack! Pouch, batteries, dip coils, power supply. ***Save $7!***

MFJ-92AA10, $24.95. 10-Pack AA Rechargeable Ni-MH Batteries.

MFJ-5510, $6.95. 12 VDC Cigarette lighter adapter cord for using your MFJ SWR Analyzers *on-the-road*. 18" retracted curly cord, 60" fully stretched.

Super High Capacity 2000 mAh Ni-MH AA Batteries

MFJ-92AA01
$2.99
Ship Code A

MFJ-92AA01, $2.99 each.

MFJ's *super high capacity* Ni-MH "AA" batteries have twice the power of standard Nicads at about the same price!

MFJ batteries have *no* detrimental memory effect that are the trademark of Ni-Cad batteries so you can use them to their full potential. **MFJ-92AA10, $24.95.**

10-Pack of MFJ SuperCells™, perfect for your MFJ SWR Analyzer!

MFJ *POWERHaus*™ Ultra-fast Intelligent Charger

MFJ-633
$24.95
Ship Code A

Charges AA-AAA-C-D and 9V Ni-MH or Ni-Cd Battery types. Active intelligent IC detects positive/negative, and monitors the voltage level during charging process. 2 separate sets of charging compartments optimize energy efficiency. Auto switches to trickle when full charge is completed. Deep conditioning mode helps rescue batteries damaged by memory effect. Charging status LEDs, removable dust cover and 12V, 500 mA AC adapter is included. Quick charges 2-4 AA Ni-MH cells in an hour or less!

HF/VHF/UHF SWR Analyzers for all Your Building Needs

MFJ Analyzers Measure SWR from 270-480 MHz

MFJ-229
$179.95
Ship Code A

Read SWR of any antenna from 270 to 480 MHz.

Just plug in your antenna coax, set the frequency and read SWR!

Easy-to-read LCD displays frequency and SWR and has a *logarithmic* SWR bargraph for precision tuning. Two line high-contrast LCD has 32 huge 1/4 inch characters.

Select any desired frequency range for tuning. Examples: Tune from 280 to 295 MHz, 320 to 350 MHz or 400 to 450 MHz.

Tuning knob has a built-in 10:1 vernier reduction drive for precision tuning.

You can use the MFJ-229 to adjust dipoles, verticals, yagis, quads and other antennas and determine their SWR, resonant frequency, and bandwidth.

Test and tune stubs and coax lines. You can determine velocity factor, impedances and estimate losses of transmission lines.

Adjust and test RF matching networks and RF amplifiers without applying power.

Use as signal source for testing and alignment. Measures 3¾Wx6½Hx1¾D".

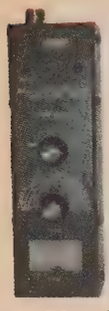
Foam-Padded carrying case

MFJ-6404
$39.95
Ship Code C

New!

Great for portable, dxpeditions, traveling, hotels, etc. Heavy-duty case takes a beating but keeps electronics safe with its universal foam insert. Pre-separated tear-away cubes let you shape the foam to custom fit your gear. Eggshell type padding on topside. Handle, carrying strap, two key sets, left/right snaps. 10¾Dx16Wx4H in. **MFJ-6404F, $9.95.** Extra foam insert for MFJ-6404. Picture shown with accessories (not included).

HF *10-160M SWR Analyzer™*



MFJ-207
$79.95
Ship Code A

This compact MFJ HF SWR Analyzer will help you build the antennas you need for DX work.

Just plug in the coax to measure the SWR of any HF antenna, 160 to 10 Meters. Has jack for external frequency counter. 9VDC of 110 VAC with **MFJ-1312D($14.95).**

Plug in coax to find the SWR of any HF antenna on any band 10-160 Meters.

Jack for external frequency counter. 9 V battery or 110 VAC with MFJ-1312D, $14.95. Measures 7½Hx2½Wx2¼D in.

MFJ VHF *SWR Analyzer™*

MFJ-208
$79.95
Ship Code A

VHF *SWR Analyzer™* finds the SWR of any antenna from 138-156 MHz.

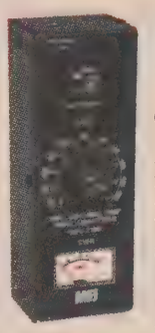
Jack for external frequency counter.

Measures 7½Hx2½Wx2¼D in. 9 V battery or 110 VAC with **MFJ-1312D,** $14.95.

6-Meter SWR Analyzer

MFJ-217, $79.95, same as MFJ-208 but covers 30-56 MHz for 6 Meters and commercial VHF. Jack for external frequency counter. Dimensions, power requirements same as above.

MFJ-219B Econo MFJ-229



MFJ-219B
$99.95
Ship Code A

Similar to MFJ-229, less LCD display. Has meter for SWR and jack for external frequency counter.

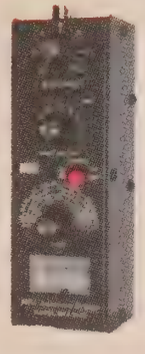
Measures 2½Wx7½Hx 2¼D inches. MFJ-229 and MFJ-219 have "N" connector with *free* N-to-SO-239 UHF adapter.

Also they have Battery Check and Power Saving feature. For 50 Ohm systems.

Use 9-Volt battery or 110 VAC with **MFJ-1312D, $14.95.** 10 AA batteries for MFJ-229 or 110 VAC adapter.

MFJ Antenna Bridge

MFJ-204B
$79.95
Ship Code A



No other equipment needed. Take it to your antenna site.

Determine if your antenna is too long or too short, measure its resonant frequency, and its resistance to 500 ohms.

It's the easiest, most convenient way to determine antenna parameters.

Resistance bridge, null meter, tunable oscillator-driver (1.8-30MHz). 9 VDC or 110 VAC with **MFJ-1312D, $14.95.**

Measures 7½Hx2½Wx2¼D inches.

MFJ RX Noise Bridge

MFJ-202B
$59.95
Ship Code A

Quickly adjust almost any antenna for maximum performance, 1 to 100 MHz.

Lengthen or shorten your antenna for minimum SWR. Measure resonant frequency, feedpoint resistance and reactance.

Works with any receiver or transceiver.

Hand-calibrated resistance scale, expanded capacitance range and exclusive built-in range extender. 4¼Wx2Hx4D in.

Custom 24-35 MHz Analyzers

$249.95
Ship Code A

For commercial applications. Select a specific frequency range and MFJ will customize an analyzer for you. Choose the model below for your needs. Specify frequency range and allow 4 weeks for these models.

MFJ-220A, 24-49 MHz
MFJ-220B, 34-69 MHz
MFJ-220C, 45-91 MHz
MFJ-220D, 67-135 MHz
MFJ-220E, 90-176 MHz
MFJ-220F, 190-350 MHz
MFJ-220G, 140-260 MHz

Economical Dip Meter covers 1.5-250 MHz

MFJ-201
$119.95
Ship Code A

Back in the vacuum tube days they called these babies *grid* dip meters and every ham and experimenter either had one or wanted one. The MFJ-201 solid state (hence no "grid") is smaller, lighter, and vastly more versatile than its ancestor. Use it as a traditional dip meter to find a coil's resonant frequency.

Couple it to an antenna, or to coax lines to get their electrical length.

Or use it as an absorption wavemeter for measuring transmitter output, neutralizing tank circuits, or a field strength meter.

Other traditional dip uses include: crystal oscillator, monitoring audio signal output (it includes a headphone jack), and measuring inductance and capacitance.

This solid-state grid dip meter covers 1.5-250 MHz in 6 bands, has thumb wheel tuning, color code readout, 6 coils, earphone jack and battery check. Uses a 9V battery for operation. Measures a compact 2Wx2½Dx7H" including coils.

2-Meter FM Signal Analyzer

MFJ-224
$159.95
Ship Code A

MFJ's hand-held Two Meter *FM Signal Analyzer™* lets you measure signal strength with over 60 dB dynamic range and measure actual feedline loss in dB. Plug in any scope and your MFJ-224 becomes a service monitor! Lets you visually analyze modulation wave forms, audio distortion, noise and instantaneous peak deviation. Tune in any signal between 143.5 - 148.5 MHz. Built-in discriminator-meter function makes accurate tuning simple and easy. 4Wx2½Dx6¾H". Use 9V battery.

Equip your test bench with these MFJ products

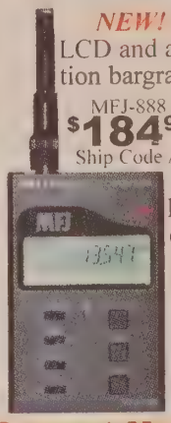
MFJ Frequency Counters Cover 1 MHz to 3 GHz or 10 Hz to 3 GHz

MFJ-886
$119.95
Ship Code A

MFJ-886 Frequency Counter covers 1 MHz to 3 GHz. It features 300 MHz direct count with 0.1 Hz-per-second resolution. *Incredible deal also includes Ni-Cd battery pack, charger and telescopic whip!*

10-digit high-contrast LCD display is easy-to-read. Huge ¾ inch digits are highly visible. Hold switch locks display. Synchronous detector gives ultra-sensitive RF Signal Strength LCD bargraph. Four selectable gate times gives .1 Hz to 10 Hz resolution in 300 MHz range and 10 Hz to 1000 Hz resolution in 3 GHz range.

Rechargeable Ni-Cd battery pack (included) gives up to 6 hours of use. Low battery LED indicator. Rugged aluminum cabinet (2¾Wx3¼Hx1¼D inches) fits in shirt pocket and has black anodized finish.



MFJ-888
$184.95
Ship Code A

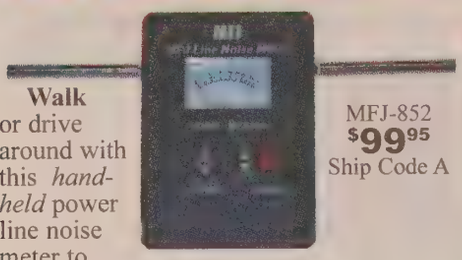
NEW! **MFJ-888** covers 10 Hz to 3 GHZ with a 10-digit LCD and an ultra-sensitive synchronous detector with 16-section bargraph to show RF signal strength.

It features a Hi-Z low range, auto-hold, measures frequency and period, has LED backlight, beeper, low power consumption, hold switch to lock display, low battery indicator and more. A high-speed 300 MHz direct counter with 0.1 Hz resolution has four selectable gate speeds.

Built-in Ni-Cd battery pack will operate up to 6 hours and recharges with the external charger. **MFJ-888** (2¾Wx4¼Hx1¼D") is complete with Ni-Cd battery pack, charger, and telescopic whip.

Housed in a handsome stamped aluminum cabinet with black anodized finish.

Find Power Line Noise Fast!



MFJ-852
$99.95
Ship Code A

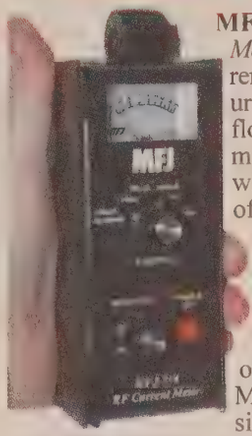
Walk or drive around with this *hand-held* power line noise meter to search out leaky insulators, loose hardware and corroded ground lines quickly. Track the noise source right down to the pole, transformer or insulator, or other source.

Operates in the 135 MHz region where activity is a minimum and radiation from corona and arcing is far more localized. 0.3 uV sensitivity and wide-range AGC for noise level meter -- *over 70 dB!*

Plug in headphones and hear the noise you're tracking or plug in a tape recorder. 2Wx4Hx1.5D inches. Use 9 Volt battery.

Use this ultra-sensitive pocket-sized RFI Detector to track down and eliminate RFI caused by radiating cables and wires. It'll tell you exactly which cable is radiating RFI so you can eliminate it with a simple toroid or clamp-on RFI filter. Use it to find RFI generated by consumer devices, computers and high-tech office equipment. When you eliminate the RFI source, hash, birdies, whistles and transient noise miraculously disappear.

1-30 MHz RF Current Meter



MFJ-854
$99.95
Ship Code A

MFJ-854 *RF Current Meter* reads true RF current! Accurately measures *actual* RF currents flowing in antenna elements, radials, ground wires and on the outside of coax feedlines. Study and optimize your antennas for peak performance. Also great for tracking down RFI-causing currents on household wiring. MFJ-854's sense coil simply snaps over wires and cables for fast measurements on its easy-to-read meter. Measure actual RF current from 30 mA to 3 amps. A variable sensitivity control allows quick, fast checks. RF currents of 1 mA or less will yield a usable meter deflection for tracking RFI pickup on household wiring and cables. Sensitive enough to use an MFJ SWR Analyzer as the source to drive your antennas. MFJ-854 employs linearity compensation circuitry to assure accuracy even at low RF current. It measures RF current from 1 mA to 3 Amps in six ranges. 1-30 MHz and usable beyond. Accepts cables up to 1/2" diameter. 2½Wx5½Hx1½D inches.

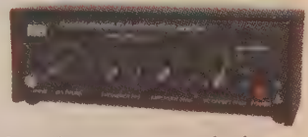
MFJ Compact Test Gear

Pocket-size Function Generator

MFJ-5000
$79.95
Ship Code A

This unique unit is the only compact, battery-operated function generator designed for travel or bench use. Based on an XR-2206 integrated circuit, it provides square, triangular, and sine waves continuously from 1 Hz to well over 150 KHz in 3 ranges. 4Hx3Wx1D inches. Frequency range switch, external power jack, 5-way binding posts. Use 9V battery.

Professional Function Generator



MFJ-5004
$129.95
Ship Code A

Gives precision sine, square and triangular wave forms from 1 Hz to 1 MHz in 6 decade ranges. Amplitude adjustable 0-12 volts peak-to-peak. DC offset is adjustable -6 to +6 VDC. Output is short circuit protected with output impedance of 400 Ohms. Sturdy black all metal cabinet. 110 VAC.

Portable Signal Tracer-Injector

MFJ-5012
$79.95
Ship Code A

Multi-purpose *Portable Signal Tracer-Injector* quickly finds defective stages in all kinds of signal amplifiers, radio receivers and transmitters. Includes home theaters, hi-fi amplifiers, public address systems, guitar amplifiers, AM/FM/ TV transceivers, phones, scanners, shortwave, etc. Use to find opens and shorts in cables and wires, identify and locate individual wires in multi-conductor cables. Has an AM detector and variable gain audio amplifier. 3Wx4Hx1D inches.

Portable Variable Power Supply

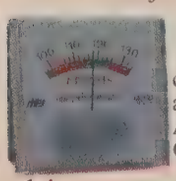
MFJ-4105
$79.95
Ship Code A

This MFJ power supply is portable enough to fit in any toolbox 3Wx4Hx1D". It's so light you can carry it anywhere. Provides fixed 5 VDC output along with a variable 1.5-12 VDC output. Total output is 500 mA. Output terminals and ground are convenient 5-way binding posts. Easy output voltage setting. Input 110 VAC.

MFJ Portable RFI Sniffer

MFJ-805
$79.95
Ship Code A

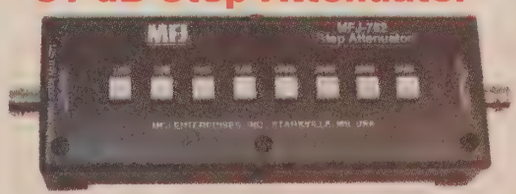
MFJ-805 works with mobile installations, ferreting out alternator hash, ignition pulses and microprocessor noise on feedlines and power leads. Isolate cables *picking up* RFI and know when you've suppressed the problem. Easy-to-use. Clamp current transformer over suspected cable or wire (up to ¼ in. diameter) to detect RFI causing common-mode currents. Compact 2¼Wx4¾Hx1D" fits in shirt pocket. Use 9 Volt battery. Usable VLF to VHF. Gain adjustable over 50 dB range.



MFJ AC Line Monitor

MFJ-850, $19.95. Color coded scale lets you read voltage from 95-135 Volts. 2% Accuracy. 2¼Wx2¼H x1½D". Great for shack & motorhomes!

81 dB Step Attenuator



MFJ-762
$69.95
Ship Code A

***This** will be your most useful ham shack accessory!* 50 ohms.

Usable to 500 MHz. 250 milliwatt maximum input. BNC connectors. Shielded stages. Connect between receiver and antenna and use an S-meter as a precision calibrated field strength meter.

Prevent receiver blocking, cross-modulation. Determine gain and loss. Ideal for fox hunting. Evaluate linearity.

Measure input and output level differences. Isolate circuits.

Extend the range of your sensitive equipment. 6½Wx2½Hx1½D inches.

MFJ Switching Power Supplies

Power your HF transceiver, 2-Meter/440 MHz mobile/base and accessories with these 25 or 45 Amp MFJ MightyLite™ Switching Power Supplies! No RF hash, Super lightweight, Volt/Amp Meters

MFJ's new adjustable voltage switching power supplies do it all! Power your HF or 2M/440 MHz radio and accessories. No more picking up and hauling around heavy, bulky supplies that can cause a hernia.

MFJ's 25 Amp *MightyLite*™ weighs just 3.7 lbs. -- that's *5 times lighter* than an equivalent conventional power supply. MFJ's 45 Amp is even more dramatic -- *8 times lighter* and weighs just 5.5 pounds!

No RF hash!

These babies are clean . . . Your buddies won't hear *any* RF hash on your signal! *None* in your receiver either!

Some competing switching power supplies generate objectionable RF hash in your transmitted and received signal.

These super clean MFJ *MightyLites*™ meet all FCC Class B regulations.

Low Ripple . . . Highly Regulated

Less than 35 mV peak-to-peak ripple under 25 or 45 amp full load. Load regulation is better than 1.5% under full load.

Fully Protected

You won't burn up our power supplies! They are fully protected with Over Voltage and Over Current protection circuits.

MFJ-4225MV
25 Amp
$149.95
Ship Code B

MFJ-4245MV
45 Amp
$199.95
Ship Code B

Worldwide Versatility

MFJ *MightyLites*™ can be used anywhere in the world! They have switchable AC input voltage and work from 85 to 135 VAC or 170 to 260 VAC. Replaceable fuse.

MightyLites™ . . . Mighty Features

MFJ *MightyLites*™ feature a front-panel voltage control. It lets you vary the output voltage from 9 to 15 Volts DC and gives you a highly regulated voltage output.

You get an easy access front-panel with five-way binding posts for heavy duty use and a cigarette lighter socket for mobile accessories. MFJ-4245MV has two sets of quick-connects on the rear for accessories.

Large 3 inch dual meters are brightly illuminated to make it easy to monitor load voltage and current. Whisper quiet internal fan efficiently cools your power supply for long life.

About the MFJ-4225MV, *QST* magazine (January 2000) said, "its external control for varying the output voltage is very handy for test bench applications," and also noted that "overall, the noise generated by this supply is very low".

Two models to choose from . . .

MFJ-4225MV, $149.95. 25 Amps maximum or 22 Amps continuous. Weighs 3.7 pounds. Measures 5¾Wx4½Hx6D in.

MFJ-4245MV, $199.95. 7½Wx4¾Hx 9D in.45 Amps maximum, 40 Amps continuous. Weighs 5.5 pounds.

Super Compact MightyLite™ 25 Amp Switching Power Supply

The smallest and lightest power supply in ham radio! Tiny 5¾Wx3Hx5¾D" fits anywhere --

MFJ-4125 is similar to the popular MFJ-4225 MV but much smaller and doesn't have meters or the cigarette lighter socket.

5-way binding posts are for high current radio connects and pair of speaker type push-on terminals are for low current accessories.

Super protection modes include Over Voltage and Over Current. Whisper quiet internal cooling fan generates tremendous air flow to help keep components cool.

MFJ-4125
$109.95
Ship Code A

No RF Hash!

MFJ-4125 has switchable AC input voltage. 110 VAC at 47-62 Hz and 220 VAC at 47-63 Hz. Super regulation. Worldwide versatility allows it to work AC input 85-135 VAC or 170-260 VAC.

Weighs only 3.5 lbs. and measures an un-believable 5½Wx2½Hx5¾D"-- it's the *smallest and lightest* power supply in ham radio! Has MFJ's *NoMatterWhat*™ one year limited warranty.

MFJ 30/22/12 Amp Regulated DC Power Supplies

Massive 19.2 pound transformer, Adjustable 1-14 VDC, Quick connects, cigarette lighter socket . . .

MFJ's heavy duty conventional power supply is excellent for powering HF or 2 Meter/440 MHz rig/accessories.

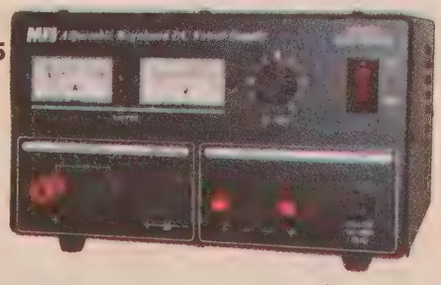
A massive 19.2 pound transformer makes this power supply super heavy duty! It delivers 35 amps maximum and 30 amps continuous without even flexing its muscles. Plugs into any 110 VAC wall outlet.

It's highly regulated with load regulation better than 1%. Ripple voltage is less than 30 mV. *No RF hash* -- it's super clean!

Fully protected -- has over voltage protection, fold back short circuit protection and over-temperature protection.

You get front panel adjustable voltage from 1 to 14 VDC with a convenient detent set at 13.8 VDC. A pair of front-panel meters let you monitor voltage and current.

MFJ-4035MV
$149.95
Ship Code F



Three sets of output terminals include a pair of heavy duty five-way binding posts for HF/VHF radios, two pairs of quick-connects for accessories and a covered cigarette lighter socket for mobile accessories.

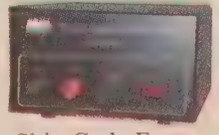
A front-panel fuse holder makes fuse replacement easy. Whisper quiet fan speed increases as load current increases -- keeps components cool. 9½Wx6Hx9¾D inches.

MFJ 22/20 Amp Power Supply

MFJ-4322, $99.95 delivers 22 Amps surge and 20 Amps continuous at 13.8 VDC. Its massive transformer, heatsink and heavy duty construction weigh over 19 pounds. 8Wx4¾Hx11¾D in. 110 VAC. Ship Code F.

MFJ 12/10 Amp Power Supply

MFJ-4312, $69.95. It weighs over 13½ lbs. 8Wx4¾Hx10¼D". Delivers 12 Amps surge & 10 Amps continuous at 13.8 VDC. 110 VAC. Ship Code F.



MFJ *High Current* DC Multi-Outlet Strips

Choose super heavy-duty 5-way binding posts AND/OR Anderson PowerPole® connectors

Provide *multiple* high current DC outlets for transceivers and accessories from your transceiver's main DC power supply – keeps you neat, organized and safe. Prevents fire hazards. Keeps wires from tangling up and shorting out. Outlets are fused/switched/RF bypassed.

MFJ *No Matter What*™ Warranty
All MFJ DC Strips are protected by MFJ's famous *No Matter What*™ one year limited warranty. MFJ will repair or replace (at our option) your strip *no matter what* for one full year.

MFJ *DC Multi-Outlets with versatile 5-way binding posts*

MFJ-1118 **$74.95** Ship Code A

MFJ-1116 **$49.95** Ship Code A

MFJ-1112 **$34.95** Ship Code A

MFJ-1117 **$54.95** Ship Code A

MFJ-1118, $74.95. Lets you power two HF and/or VHF rigs and six or more accessories from your transceiver's main 12 VDC supply. Two pairs of super heavy duty 35 amp 5-way binding posts connect your transceivers. Each pair is fused and RF bypassed. Handles 35 Amps total.Six pairs of heavy duty, RF bypassed 5-way binding posts let you power your accessories. They handle 15 Amps total, are protected by a master fuse and have an ON/OFF switch with "ON" LED light. Built-in 0-25 VDC voltmeter. Six feet super heavy duty eight gauge color-coded cable with ring tongue terminals. Binding posts are spaced for standard dual banana plugs. Heavy duty aluminum construction. 12½x2¾x2½ inches.

MFJ-1117, $54.95. For powering four HF/VHF radios (two at 35 Amps each and two at 35 Amps combined) simultaneously. Tiny 8x2x3 inches.

MFJ-1116, $49.95. Similar to MFJ-1118. No 35 amp posts. Has "ON" LED and 0-25 VDC voltmeter. 15 amps total.

MFJ-1112, $34.95. Similar to MFJ-1116. No on/off switch, LED, meter, fuse.

New! MFJ *DC Multi-Outlets with Anderson PowerPole® connectors*

Anderson PowerPole® is a registered trademark of *Anderson Power Products.*

Genderless, polarized and color coded connectors conform to ARES & RACES emergency 12V connector standard

Each *Anderson PowerPole®* outlet can carry up to 40 amps. You can fuse each outlet as needed to protect your accessories or transceiver. The main fuse is 40 amps.

The standard color coded fuses simply plug in from outside. They are widely available ATC/ATO automobile fuses and can be used for 6, 12, 24 VDC systems.

The heavy duty DC input cable is built-in – *you don't have to pay extra* just to use it! It's a high-current carrying capacity eight gauge, flexible, stranded, six foot (can be shorten) cable with 5/16 ring terminals. It's color coded Red and Black.

Extra *Anderson PowerPole®* connectors, contacts and fuses are included at *no extra cost*, unlike lesser competitive products.

An massive 0.062 inch thick double sided plated through PC board with wide traces is used. The current path has an equivalent current carrying capacity of an enormous 4 ounce trace.

RF-tight aluminum cabinet has mounting ears and ground post with wing nut.

All PowerPoles®

MFJ-1128 **$99.95** Ship Code A

MFJ-1128, $99.95. 12 outlets. Factory installed fuses: three 1A, four 5A, four 10A, one 25A, one 40A. *Built-in 0-25 VDC Voltmeter*. ON/OFF switch controls outlet 4 through 12, handles 20 Amps total. Outlet 1, 2 and 3 are unswitched, handle 40 amps total. Includes 12 pair of *Anderson PowerPole®* 24 35A contacts, 10 fuses (2 each: 1,5,10,25,40A). 12Wx1¼Hx2¾D inches.

MFJ-1126 **$79.95** Ship Code A

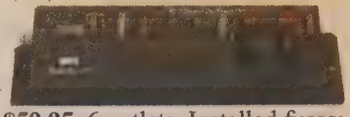
MFJ-1126, $79.95. 8 outlets. Factory installed fuses: two 1A, three 5A, two 10A, one 25A, one 40A. Includes 6 pair of *Anderson PowerPole®* 12 35A contacts and 5 fuses: (1 ea. 1,5,10,25,40). 9Wx1¼Hx2¾ inches.

PowerPoles® AND 5-Way Binding Posts

MFJ-1129 **$109.95** Ship Code A

MFJ-1129, $109.95. *Get the best of both connectors!* 10 outlets. Installed fuses: two 1A, three 5A, three 10A, two 25A, one 40A. Outlets 1, 2, 4-8 are *Anderson PowerPole®*. Outlet 3 is a 35A high current *binding post;* outlet 9, 10 are 15A *binding posts*. *Built-in 0-25 VDC Voltmeter*. ON/OFF switch for outlets 4-10, 20 amps total. Outlets 1, 2, 3 unswitched, handle 40 amps total. Includes 7 pairs of *PowerPole®* 14 35A contacts, 10 fuses (2 ea, 1,5,10,25,40). 12½Wx1¼Hx2¾D in.

MFJ-1124 **$59.95** Ship Code A



MFJ-1124, $59.95. 6 outlets. Installed fuses: one 1A, one 5A, two 10A, two 25A, one 40A. Outlets 1-4 are *PowerPole®*. Outlets 5, 6 are 35A high current *binding posts*. Includes 4 pair *PowerPole®* 8 35A contacts, 5 fuses (1ea, 1,5,10,25,10) 8Wx1¼Hx2¾D inches.

HF Transceiver Power Cord

MFJ-5535, $14.95. Replace your HF Radio original power cord at a fraction of the original cost. Two *super-flex,* 12 gauge, multi-strand, soft wires 8 feet in length. Two in-line fuse holders with fuses. Power plug is keyed to prevent reverse polarity. Get extra cords for each operating station, mobile/base. Fits Yaesu, Icom, Kenwood & compatibles.

UHF/VHF Transceiver Power Cord

MFJ-5512, $12.95. Two *super-flex,* 14 gauge, multi-strand, soft wires 15 feet in length. Single in-line fuse holder with fuse. Power plug is keyed to prevent reverse polarity. Fits Yaesu, Icom, Kenwood & compatibles.

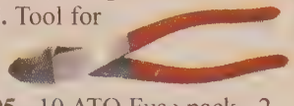
Accessories *for MFJ High Current DC Multi-Outlet strips*

Anderson PowerPole® with 40A contacts

MFJ-11C06, $ 5.49, 6 pairs.
MFJ-11C12, $10.49, 12 pairs.
MFJ-11C25, $19.95, 25 pairs.
MFJ-11C100, $79.95, 100 pairs.

New!

MFJ-7602, $9.95. Tool for crimping *Power-Pole®* connectors.



MFJ-11F20, $9.95. 10 ATO Fuse pack. 2 each: 1,5,10,25,40 amp.

Banana Plugs for binding posts

A. MFJ-7713, $4.95. One red, one black high current banana plug.

B. MFJ-7700P, $5.95. Six pairs *solderless* Red and Black banana plugs.

New!

C. MFJ-7709, $5.95. High current *dual* banana plug, has Black and Red polarity rings.

Transceiver Power Cords with *PowerPoles®* connectors

MFJ-5535M, $19.95. HF radio Power Cord, HF Molex to *Anderson PowerPole®*.
MFJ-5512M, $17.95. VHF/UHF radio power cord. T-connector to *Anderson PowerPole®*.

MFJ Pocket Size Morse Code Tutor

Learn Morse code fast, anywhere . . . LCD display lets you check your copy instantly . . . easy no-code beginner's course . . . plain English QSOs .

MFJ-418
$79.95
Ship Code A

Beginner's Course

ARRL/VEC format. Learn small fixed sets of characters. Previously learned sets are combined with new sets to reinforce all you have learned.

Practice copying, then instantly replay to check your copy on the LCD display.

Custom Character Sets

Having trouble with certain characters? Build and save 3 custom sets of 16 characters for extra practice -- *an MFJ exclusive.*

Practice copying *realistic* on-the-air style plain English QSOs. Gets you ready to pass your FCC test and upgrade. Also builds confidence for your first *real* contact.

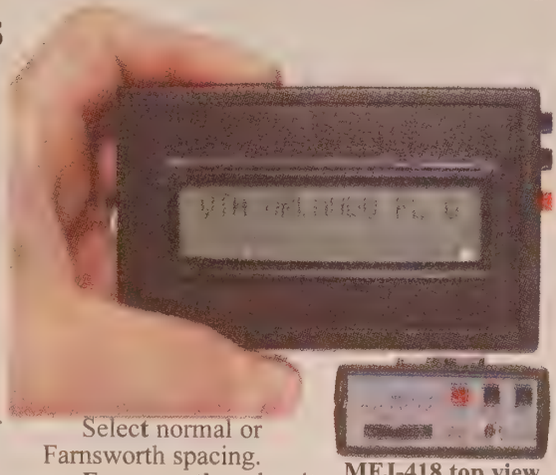
MFJ Word Recognition Mode™

MFJ's *Word Recognition Mode™* gives you hundreds of commonly used words in ham radio. Practice recognizing *entire words* instead of individual letters.

Select letter, number, punctuation, prosign or FCC character sets (has *only* letters, numbers and prosigns required on FCC tests), random call signs, random words, QSOs or combo sets for practice -- *you'll never run out of study material!*

MFJ InteractiveMode™

InteractiveMode™ lets *you* decide when to copy the next or previous group and how many -- great for beginners!



MFJ-418 top view

Select normal or Farnsworth spacing.

Farnsworth makes it easier to learn *entire* characters. Stop counting individual dots and dashes that slows learning! Adjustable 10 to 60 WPM for high-speed.

Use fixed length or more realistic random length groups (up to 8 characters).

You can change speed *on-the-fly* while playing a session 3 to 60 words-per-minute.

SettingSaver™

Settings are automatically saved, ready to use next time--just turn on and replay.

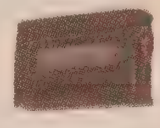
Check your copy, select from menus and program custom characters and words on 2 line LCD display with 32 *huge* 1/4 inch high-contrast characters -- *powerful sound and sight learning!*

Only MFJ gives you *SilkySmooth Sidetone™* with *TruTone™* sinewave and *SoftStart™* dots/dashes -- lets you concentrate on learning without distracting, harsh keyclicks. Use earphones for private practice or built-in speaker for groups. Volume control. Variable pitch 300-1000 Hz.

Fits in your shirt pocket with room to spare -- smaller than a pack of cigarettes. Tiny 2¼x3¾x1 in., weighs less than 5½ ounces. Uses 9 volt battery (not included).

Tapes play the same old boring stuff over and over. Unlike tapes, you'll *never* memorize MFJ-418's random sessions.

Pocket Tutor Accessories



MFJ-26B, $6.95. Soft leather protection for MFJ-418 with pocket/belt clip.

MFJ-281, $12.95. Speaker for group practice. Loud, powerful audio! 3¾x3x2¼"

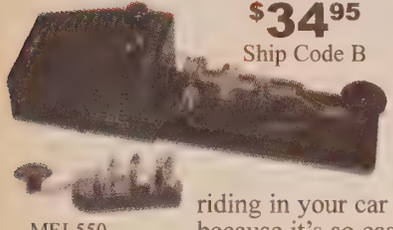
More pocket size MFJ Morse Tutors

MFJ-417, $59.95. Similar to MFJ-418, but no LCD. Most software features.

MFJ-413, $39.95. Similar to MFJ-417, less random words, QSOs, SettingSaver™.

Deluxe Morse Key and Oscillator for Code and Sending Practice

MFJ-557
$34.95
Ship Code B



MFJ-550
Telegraph key only
$7.95
Ship Code A

MFJ-557 *Deluxe Code Practice Oscillator* features a Morse straight key on a non-skid heavy steel base -- stays put and doesn't move around while you're sending.

MFJ-557 lets you practice sending code at home, work, riding in your car -- practically anywhere -- because it's so easy to take it wherever you go. Volume control adjusts from barely audible to blaring full sound.

You can practice without bothering anyone.

Tone control gives you a wide adjustment, from high "squeaky" to low "booming" tones. You even get an earphone jack for private listening times.

Plug in an external speaker (**MFJ-281, $12.95,** powerful compact speaker) for high volume in the classroom.

MFJ-557 runs on a 9 volt battery (not included) or 110 VAC with MFJ-1312, $14.95. Plugs into jack on the side.

When you're finished cleaning up your fist with the MFJ-557, hook up the straight key to your transmitter and go *on-the-air.*

Don't pass up a super buy! Built-in speaker, adjustable contacts. 8½x2¼x3¾ inches. Black.

Use HT for on-the-air CW Fun

MFJ-552
$79.95
Ship Code A

MFJ's *JimHandy™* CW interface plugs into your 144/440 MHz handheld and converts it into a modulated CW transceiver -- just plug in your key.

Get your ham buddies together *on-the-air* and enjoy some fantastic CW fun. Run a little code practice on your repeater. Start your own FM CW Net. Have fun and upgrade! A transmit/receive switch automatically switches your HT to transmit when you send CW and returns you to receive when you stop keying.

Built-in speaker, volume control and great sounding *true* sinewave sidetone -- no harsh keyclicks. 4Wx1¼Hx3¾D inches. Use 9V battery (not included). Pre-wired patch cables, $15.95 for your HT on page 31. **MFJ-550** key only, **$7.95.**

Classroom Code Oscillator

MFJ-554
$79.95
Ship Code A

The world's finest code practice oscillator is de- signed for demanding classroom use and abuse.

It produces a true pure *sinewave* sidetone with no trace of harsh keyclicks. You'll hear the clearest, sweetest sounding CW you have ever heard. Delivers full 1 watt into built-in 3" speaker -- fills an entire room. Low distortion -- less than .2% total harmonic distortion from its BTL (Bridge-Tied-Load) amplifier. Volume control, 400-1000 Hz tone control, on/off switch, power on LED, ¼ inch key jack, 3.5 mm external speaker jack, uses 12 VDC. All metal enclosure 4¾x1½x5 in.

Save $15.85! **MFJ-554X, $99.95.** Includes MFJ-554 Code Oscillator, MFJ-281 *ClearTone™* speaker, MFJ-550 Telegraph Key, & MFJ-1312D AC adapter.

Classroom Morse Code Tutor

MFJ-414
$199.95
Ship Code A

The Cadillac of all Morse Code trainers! For VECs, Elmers, teachers, ham clubs, schools and hams who want the best. Has everything in the famous MFJ-418 *Pocket Size Morse Code Tutor™* plus . . . Hear powerful classroom audio from its built-in speaker/ amplifier with true sinewave sidetone and no harsh keyclicks. Down/upload custom practice groups from PC with serial port . . . Store 16 FCC exams for VECs . . . Print correct answers using printer port . . . Record quality code tapes with tape output . . . Send *on-the-air* CW practice with HF/VHF radio interface. . . Use full featured memory keyer with 1000 character memory. Serial port and open end HT cables included. 110 VAC /12VDC operation. 8½Wx2¼Hx6D inches.

MFJ/Curtis/Bencher is a winning CW combo!

MFJ-422D
$169.95
Ship Code B

The Best of all CW worlds -- a *MFJ/Curtis* keyer™ in a compact package that fits on the Bencher iambic paddle! Buy the combination or just the keyer for your Bencher or MFJ paddle.

MFJ's most popular keyer is small but big in features giving you adjustable weight and tone and has front panel volume and speed controls (5-65 wpm). Has built-in dot-dash memories, speaker, sidetone and auto or semi-auto/tune modes.

Keys solid state or tube transmitters. Fully shielded. 9 volt battery or 110 VAC with **MFJ-1312D, $14.95.**

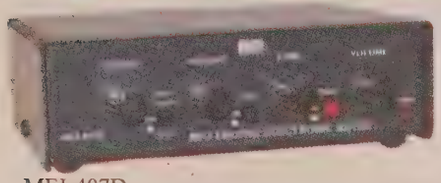
MFJ-422DX
$79.95
Ship Code A

Keyer mounts on the paddle base to form a small 4x2¼x4¼". *Buy the combo or just the MFJ keyer* **(MFJ-422DX)** to fit on your Bencher or MFJ-564 or MFJ-564B iambic paddle (see below).

Paddles to use with MFJ-422DX

MFJ-564 Black or Chrome, $59.95 (see below). **BY-1, $119.95.** Black Bencher. **BY-2, $139.95.** Beautiful chrome Bencher paddle.

MFJ Curtis Iambic Keyer has Dot, Dash Memory



MFJ-407D
$69.95
Ship Code A

Everything you need to send great CW from this *MFJ Cutris* Keyer™ -- easy access front panel controls, *all* keyer modes, dot-dash memories, jam-proof spacing, weight control, sidetone, built-in speaker and more. Speed, weight, tone and volume controls, and tune, semi-auto and on/off switches are on the front panel.

A dual paddle key such as the MFJ-564, lets you use the *iambic mode*. In this mode, you can insert a dot before a dash finishes or insert a dash before a dot finishes. Also, squeezing both paddles generates alternating dots and dashes. This lets you send characters such as C, K, and R with a single squeeze. It turns an inexperienced fist into a professional.

You can use the *automatic* mode with a single or dual paddle. You automatically generate dots and dashes by pressing the paddle.

You can switch into a *semi-automatic "bug"* mode to generate dots automatically and dashes manually. Or you can use a *"straight key"* and manually generate your own dots and dashes.

You get dot-dash memory, self-completing dots and dashes, jam-proof spacing and instant start keying.

Select Type A or Type B keying to match your sending style.

Weight control lets you adjust your dot-dash space ratio to make your signal distinctive to bust through pile-ups. It also lets you compensate for the turn-on delay of your transmitter.

Has tune switch for tuning your transmitter or antenna tuner. RF proof. Built-in speaker for sidetone.

Keys solid state and tube transmitters. Use 9 volt battery or 110 VAC with MFJ-1312D, $14.95. Attractive black cabinet measures 5¾x1¾x4¾ inches.

MFJ/Curtis ECONO Keyer™

MFJ-401D is the same as MFJ-407D except weight and tone controls are adjusted internally and doesn't have a tune switch. Use 9 volt battery or 110 VAC with MFJ-1312D, $14.95. 4x1¾x3¼ inches.

MFJ-401D
$49.95
Ship Code A

Build Your Own Keyer with this Curtis Chip

Revolutionary new Curtis Chip. Choose . . . 28 pin skinny DIP or SMT SOIC package. **MFJ-8045ABM, $19.95.**

New!

Pre-Wired Keyer to Rig Cables

MFJ-5164, $9.95. Keyer to radio keying cable. Has phono plug on keyer end to fit MFJ keyers and a 3.5 mm plug with 1/4" phone plug adaptor to fit most transceivers.

MFJ *Nano-size* Keyer/Paddle Combination

MFJ-402
$59.95
Ship Code A

Ham radio's tiniest electronic keyer has a built-in iambic paddle! It's just 2x3x1 inches and weighs 3½ ounces!

Fully-enclosed paddle has a "bug" feel for smooth CW. It's precision formed from resilient phosphorous bronze.

It's easy-to-use. Just set one button and send one letter to change your keyer settings -- speed 5-65 WPM, weight 25%-75%, iambic mode A/B, normal or "bug" mode and reverse paddle.

Screwdriver adjustment for easy speed change. Tune mode for tuning antenna tuner or transmitter. RF proof. 4 foot cord with 3.5 mm plug. Keys nearly any rig.

No on/off switch -- keyer turns off between dits! Battery lasts nearly shelf life.

Pocket Travel Keyer has Built-in Paddle

MFJ-403P
$69.95
Ship Code A

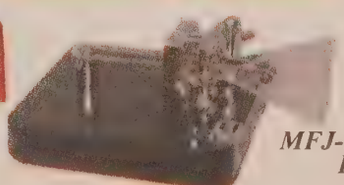
This MFJ Travel Keyer is a full-featured CW keyer with a built-in Iambic paddle.

Ultra-compact size 3¾Wx 1H x2¼D" is perfect for traveling or for home use with QRP or "big" rigs. Throw it in your briefcase along with your MFJ *Cub*™ or other favorite on your next trip. A built-in sidetone with LM386 audio amplifier, speaker and volume control makes monitoring your sending easy. Speed adjustable from 3 to 60 WPM. Sidetone pitch is adjustable 300 to 1000 Hz. Weight adjustable from 25% to 75%. Tune mode, RF proof, Battery Saver feature. Select a keyer mode to suit you - - iambic mode A or B, fully automatic or semi-auto "bug" mode. Use 9 Volt battery, not incl.

MFJ-403, $49.95. MFJ ultra compact CW Travel Keyer only.

MFJ Deluxe Iambic Paddles

MFJ-564 Chrome



MFJ-564B Black

MFJ-564/B
$59.95
Ship Code A

MFJ deluxe iambic paddles feature a full range of adjustments in tension and contact spacing, self-adjusting nylon and steel bearings, contact points that almost never need cleaning, precision machined frame and non-skid feet on heavy base. Use with MFJ-422DX/MFJ-490X keyers. **MFJ-5166, $9.95,** ***(left).*** Paddle to Keyer cable. Has pre-wired solder lugs on paddle end and 3.5 mm plug with 1/4" phone adaptor to fit MFJ keyer.

MFJ *Miniature* Iambic Paddle

MFJ-561
$19.95
Ship Code A

This *miniature*, lightweight iambic paddle is just 1¾Wx1¾Dx¾H inches and weighs just 2½ ounces. Tiny enough to fit in an *Altoids*® tin (cord and all!) for protection. It's perfect for traveling or for home use with QRP or "big" rigs. Perfect companion for MFJ or other keyers. Great for any QRP or QRO rig! The paddle is precision formed from special phosphorous bronze spring material with an A150 temper. This gives you an excellent feel so you can send smooth CW. Mounted on rugged metal base with non-skid rubber feet. Has 4 foot cord and 3.5 mm plug -- ready to plug into keyer or rig! **MFJ-561K, $14.95.** ***Build your own!*** MFJ iambic paddle kit with instructions, cord, hardware needed to build your paddle.

MFJ Millenium™ CW Memory Keyer

Is CW dead?

Not at MFJ! MFJ's menu driven LCD display makes it so easy to use, you don't need an instruction manual.

The MFJ-495 combines the latest millenium microprocessor technology with non-volatile EEPROM memory for a full-featured, low cost, high reliability design.

Send CW or load messages using a paddle, keyboard or computer serial port.

Easy-to-use menus and LCD display let you set all keyer functions merely by pushing buttons. Keyer functions can also be changed from your paddle, keyboard or computer.

The LCD also shows the message as it's being sent from memory or live from your paddle, keyboard or computer.

The MFJ-495 has 32 message memories of 256 characters each. You can repeat messages continuously, insert timed pauses within messages, insert an auto-incrementing serial number, have messages call other messages or insert embedded commands to change speed, weight, etc. automatically.

MFJ-495 supports both direct and grid-block outputs and has a port for an optional remote control. PTT output, built-in speaker, sinewave sidetone, more!

MFJ-495
$159.95
Ship Code A

Features include:

Iambic keyer with dot and dash memories; automatic, semi or hand-key mode.

Keyboard Input lets you plug in any AT keyboard for type ahead buffer. All commands, functions, and memories can be done through the keyboard!

Message editing capability.

Input queue to store multiple messages.

Auto-incrementing contest serial numbering from 001 to 9999.

Digital and linear analog speed control from 5 to 99 wpm (3:1 to 20:1 speed range)

Farnsworth, speed from 10 to 99 wpm

Ultra speed sets messages up to 990 wpm

Adjustable weight 25% to 75%

Adjustable sidetone from 300 to 1000 Hz

Keying output delay up to 20 ms

Push-to-talk (PTT) hang time up to 5 sec.

Direct (positive) or grid-block (negative) keying

Timed tune for XMTR adjustment

Timed pauses in messages/message loop

Internal speaker with adjustable volume

Supports Qwerty and Dvorak keyboards

190 characters type-ahead keyboard buffer with low buffer warning

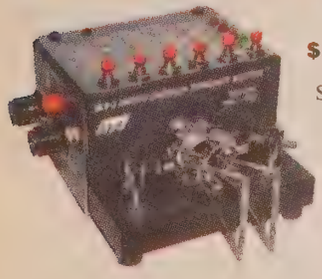
Dual user mode supports operators with different configuration settings

Compact and handsome all-black metal cabinet measures just 6¼Wx2½Hx6¼D in. Use 12 VDC or 110 VAC with **MFJ-1312D, $14.95** AC adapter.

RFI-Suppressed Keyboard

MFJ-551, $39.95. RFI suppressed keyboard.

Menu Memory Keyer/Bencher Paddle



MFJ-490
$199.95
Ship Code B

The MFJ Menu Driven Memory Keyers™ are the easiest memory keyers to operate. You can even operate them without an instruction manual! There's no keypad, no complex sequence, nothing to remember. Just select a menu by pressing a button. An LED lights to indicate which menu is active. Then select a feature by pressing a Feature button. It's as easy as using a computer touch screen.

Each menu is clearly printed on the front (or top) panel -- no confusion. From the menu you can save and play messages, decrement serial numbers, set Speed, Weight, Sidetone, enter Iambic, Semi-auto, Handkey, Message Queue, Paddle command modes, turn Sidetone on and off, transmitter Tune, and set keying output on or off.

You can select iambic A or B, reverse paddle, Morse trainer, and store starting serial number for contests. Bypass the menu by keying in simple two-letter commands. The keyer tells you its status in CW.

You can adjust CW speed, 5 to 100 wpm, by pressing the dot or dash paddle smoothly or by knob control. The powerful Morse trainer lets you practice or teach in Farnsworth or normal mode. Select letters, numbers, prosigns, or any combination for practice using five character groups, or more realistic 1-8 character groups.

Super Menu Driven Memory Keyer

MFJ-492
$99.95
Ship Code A

And more! You get contest serial numbering (0-9999) with auto-increment, built-in sidetone, speaker, front panel volume control and adjustable 300-3000 Hz tone. You can use automatic, semi-automatic or bug or handkey modes, reverse dot/dash paddles, adjust weight from 5 to 95%, and compensate for transmitter distortion, You can key direct or grid-block keying transmitters, solid state or tube rigs. Special MARS characters recognized.

The MFJ Menu Driven Memory Keyer™ has 192 character (8K) memories. The memories are divided into four soft sectors. Uses 9V battery (not included) or 110 VAC with **MFJ-1312D, $14.95.** Memories are backed up by a lithium battery.

Order **MFJ-490, $199.95**, Memory Keyer/Bencher paddle combination, 5X3X5½ in. **MFJ-490X, $109.95,** is the keyer only.

MFJ-492, $99.95, stand alone keyer, 6½X2½X6¾ in.

MFJ-492X,$114.95 (MFJ-492 with 8K additional memory installed), **MFJ-80, $19.95,** (8K memory for MFJ-492 only).

MFJ-78, $29.95, full function wired remote control.

MFJ Slimline™ Electronic Keyers with Memory

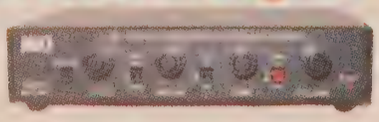
MFJ-442
$169.95
Ship Code B

Tired of sending the same phrase on CW over and over? "QTH, name..."

But you don't want to pay the price of a memory keyer, or they're too confusing to use. The MFJ *Slimline* keyers have the answer -- a *Slimline*™ keyer and an iambic paddle are your entry into real CW, at a price not much higher than a plain keyer, with enough memory to store the essential day-to-day messages.

Weight control lets you lengthen or shorten dots and dashes. It compensates your transmitter for a proper 1:3 ratio. Dot/dash lengths are adjustable for a distinctive "touch." Has

MFJ-447
$79.95
Ship Code A



Type A and B keying, too.

The Slimlines have MFJ's 500 character non-volatile *MessageMemory*™.

You can embed Message Loop, Extra Word Space, pause and serial number increments after each sending.

LED blinks during programming and blinks faster for low memory.

***SlimLine*™** keyers have sidetone volume and tone control, and CW speed (5 to 65 wpm) and weight controls.

Semi-auto lets you make dashes manually for "bug" operation. Use dual or single lever paddle. Positive and negative keying. 9V battery or 110 VAC with **MFJ-1312D, $14.95.**

MFJ-441
$59.95
Ship Code A

MFJ-442, *SlimLine*™ Keyer and MFJ paddle combo. Front panel speed, volume controls.

MFJ-442X, $89.95. Keyer only. 4x1¾x2¾ inches. Fits on your Bencher or MFJ-564/B iambic paddle.

MFJ-447 *SlimLine*™ Deluxe keyer; front panel speed, weight, tone, volume controls and message, semi-auto, tune, power buttons. Jack for speaker/headphones. 6¼x1¾x5 in.

MFJ-441. *SlimLine*™ Econo Keyer. Just 1¼ inches tall. Has volatile 89 character *MessageMemory*™. Front panel speed/volume controls. 4x1¾x3¼ inches.

New! MFJ Pre-Wired Keyer-to-rig and Paddle-to-Keyer Cables

MFJ-5164, $15.95. Keyer to radio keying cable. Has phono plug on keyer end to fit MFJ keyers and a 3.5 mm plug with 1/4" phone plug adaptor to fit most transceivers.

MFJ-5166, $15.95. Paddle to Keyer cable. Has pre-wired solder lugs for MFJ, Bencher and other Iambic paddles and 3.5 mm plug with a 1/4" phone plug adaptor to fit most MFJ and other keyers.

Morse Code Reader has Built-in Memory Keyer

Is your CW rusty? ***Relax*** and plug-in this MFJ Morse Code Reader with built-in keyer at your operating position. Then watch CW turn into solid text messages as they scroll across an *easy-to-read* LCD display.

It makes working high speed CW a breeze - - even if you're rusty. Type-ahead buffer, message memories and adjustable speed get you ready to compete with the world's best hi-speed CW operators – and they won't even know you just passed the code test!

The MFJ-464 gives you everything you need to have the ultimate CW Station: sends and Reads 5-99 WPM . . . Automatic speed tracking . . . Large 2-line LCD shows send/receive messages . . . single or iambic paddle or computer keyboard operation . . . Front panel speed, volume controls . . . 4 message memories . . . type ahead buffer . . . read again buffer . . . adjustable weight & sidetone . . . RFI proof . . . much more!

MFJ-464
$179.95
Ship Code B
(Keyboard, paddle not included)

Reader has Auto Speed Track

MFJ *AutoTrak*™ automatically locks on, tracks and displays CW to 99 wpm.

Simply plug-in your MFJ-464 to your receiver speaker until the lock LED flashes in time with the CW.

High performance modem

Consistently get solid copy from MFJ's high performance *PLL* (*phaselock loop*) modem. Digs out weak signals. Even tracks slightly drifting signals. Of course, nothing can clean and copy a sloppy fist, especially weak signals with lots of QRM/QRN.

Built-in keyer features

The MFJ-464 combines the latest millenium microprocessor technology with non-volatile EEPROM memory for a full featured, low cost, high reliability design.

You can send CW or load messages using a paddle, keyboard or through yourcomputer serial port.

Easy-to-use menus and LCD display let you set all keyer functions merely by pushing buttons. Keyer functions can also be changed from your keyboard or computer.

The LCD also shows the message as it's being sent from memory or live from your paddle, keyboard or computer.

The MFJ-464 has 4 message memories of 256 characters each. You can repeat messages continuously, insert timed pauses within messages, insert an auto-incrementing serial number, have messages call other messages or insert embedded commands to change speed, weight, etc. automatically.

Sinewave Sidetone . . . More!

MFJ-464 supports Direct keying output. Has PTT output, built-in speaker, sinewave sidetone and more! Iambic keyer with dot and dash memories; automatic, semi or hand-key mode. Input queue lets you store multiple messages. Auto-incrementing contest serial numbering from 001 to 9999.

Adjustable Speed 5-99 WPM

Digital linear speed control, 5-99 wpm
Farnsworth Mode with speed adjustable from 10-99 wpm.
Ultra speed sets messages up to 990 wpm.
Adjustable weight 25% to 75%.
Adjustable sidetone from 300-1000 Hz.
Keying output delay to 20 milliseconds.
Push-to-talk hang time to 5 seconds.
Timed tune function for XMTR adjusting.
Timed pauses in messages/message loop.
Internal speaker with adjustable volume.
Qwerty & Dvorak keyboards.

Type-Ahead Buffer

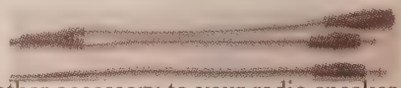
190 character type-ahead keyboard buffer with low buffer warning.
Keyboard Input Use any AT keyboard to program functions & memories.
Compact *black* metal, 6¼Wx2½Hx6¼D". 12VDC or 110VAC w/ MFJ-1312D, $14.95.

MFJ-464 Accessories

MFJ-5161, $14.95. MFJ-464 to computer serial port cable (DB-9).

MFJ-5162, $5.95. Connects **MFJ-464** to radio's external speaker 3.5 mm jack.

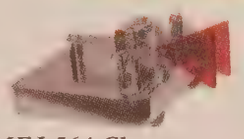
MFJ-5163, $8.95. Connects MFJ-464 and another accessory to your radio speaker.



MFJ-5164, $9.95. Keyer to radio keying cable. Has phono plug on keyer end to fit MFJ keyers and 3.5 mm plug with 1/4" phono plug adapter to fit most transceivers.

MFJ-551, $39.95. RFI suppressed keyboard, a must to avoid RFI problems when operating CW keyboard mode.

MFJ Deluxe Iambic Paddles



MFJ-564 Chrome

MFJ-564/B
$59.95
Ship Code A

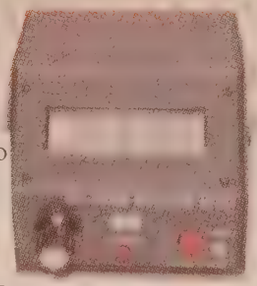
MFJ-564B Black

MFJ deluxe iambic paddles feature a full range of adjustments in tension and contact spacing, self-adjusting nylon and steel bearings, contact points that almost never need cleaning, precision machined frame and non-skid feet on heavy base. MFJ-422D and MFJ422DX/MFJ-490X keyers can be used with these paddles. **MFJ-5166, $9.95.** Iambic Paddle to keyer cable. Has pre-wired solder lugs on paddle end and 3.5 mm plug with 1/4" phone adapter to fit MFJ keyer.

Super CW Keyboard -- No Computer Required!

MFJ-452
$139.95
Ship Code B

MFJ-452X
$109.95
Ship Code A
No Keyboard



MFJ *Super CW Keyboard* lets you send effortless CW as soon as you turn it on -- no computer to boot, no program to load -- just start typing.

You get a standalone MFJ CW Keyboard that includes an RFI suppressed keyboard, a two line 16 character LCD display, eight 250 character nonvolatile message memories, a 150 character type-ahead buffer, iambic keyer, plus a powerful Morse Code trainer, more!

Variable speed from 5 to 100 WPM, adjustable weight from 5 to 95%, sidetone from 300 to 3000 Hz and serial number from 0 to 9999. Has buffer and memory full audible indicators. Keys solid state and tube rigs. AT101 compatible keyboard plugs into compact 3½x2½x3½ inch interface. Use 12 VDC or 110 VAC with MFJ-1312D, $14.95. **MFJ-452X, No keyboard.**

Use MFJ-5164, $9.95, keyer to rig keying cable.

MFJ Dedicated CW Keyboard

MFJ-451, like MFJ-452 but without LCD display and has two 100 character memories. **MFJ-451X,** no keyboard.

MFJ-451
$109.95
Ship Code B

MFJ-451X
$89.95
Ship Code A
No Keyboard

MFJ *Pocket size* Morse Code Reader™

Hold near your receiver -- it instantly displays CW in English!

Automatic Speed Tracking . . . Instant Replay . . . 32 Character LCD . . . High-Performance Modem . . . Computer Interface . . . Battery Saver . . .

Is your CW rusty? **Relax** and place this tiny pocket size MFJ Morse Code Reader near your receiver's speaker . . .

MFJ-461
$79.95
Ship Code A

Then watch CW turn into solid text messages as they scroll across an easy-to-read LCD display.

Use it as a backup in case you mis-copy a few characters - - it makes working high speed CW a breeze - - even if you're rusty.

Practice by copying along with the MFJ-461. It'll help you learn the code and increase your speed as you instantly see if you're right or wrong.

Eavesdrop on interesting Morse code QSOs from hams all over the world. It's a universal language that's understood the world over.

Automatic Speed Tracking

MFJ *AutoTrak*™ automatically locks on, tracks and displays CW speed up to 99 Words-Per-Minute.

Simply place your MFJ-461 close to your receiver speaker until the lock LED flashes in time with the CW.

Four Display Modes

1. Bottom line scrolls and fills with text, then that entire line is displayed on top line until bottom line refills -- makes reading text extra easy! Automatically displays speed in WPM.

2. Same as 1, without speed display -- gives you maximum text display.

3. Top line scrolls, bottom line displays speed in Words-Per-Minute.

4. Both top and bottom lines scroll.

Two-line LCD display has 32 large 1/4 inch high-contrast characters.

MFJ Instant Replay

The last 140 characters can be instantly replayed. Lets you re-read or check copy if you're copying along side the MFJ-461.

High Performance Modem

Consistently get solid copy from MFJ's high performance PLL (phaselock loop) modem. Digs out weak signals. Even tracks slightly drifting signals.

Of course, nothing can clean up and copy a sloppy fist, especially weak signals with lots of QRM/QRN.

Computer Interface

The MFJ-461's serial port lets you display CW text full screen on a bright computer monitor -- just use your computer serial port and terminal program.

More Features

When it's too noisy for its mic pick-up, connect it to your radio with a cable.

Battery saving feature puts MFJ-461 to sleep during periods of inactivity. It wakes up and decodes when it hears CW.

Uses 9 Volt battery (not included).

True Pocket Size

Fits in your shirt pocket with room to spare - smaller than a pack of cigarettes. Tiny 2¼x3¼x1 in. 5½ ounces.

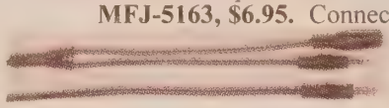
Accessories

MFJ-26B, $6.95. Soft leather protective pouch for MFJ-461. Clear plastic overlay for display, push button opening, strong, durable pocket or belt clip secures MFJ-461.

MFJ-5161, $14.95. MFJ-461 to computer serial port cable (DB-9).

MFJ-5162, $5.95. Connects MFJ-461 to radio external speaker 3.5 mm jack.

MFJ-5163, $6.95. Connects MFJ-461 and another accessory to radio external speaker, 3.5mm.



Switch any two Mics to any two Rigs

MFJ's new MFJ-1263 *Microphone Control Center* lets you mix and match *any* two microphones to *any* two transceivers.

The microphones or transceivers can have 8-pin round or 8-pin modular connectors. You don't have to change connectors or rewire -- just push buttons. Your favorite microphones will never become obsolete.

You can use your favorite microphone with your present *or* new rig by pushing a button. You can instantly switch from a hi-fi ragchewing mic to a hard-hitting DX mic when a rare one suddenly pops up.

Free your hands with external PTT

You can plug in an PTT foot switch **(MFJ-1709, $21.95)** or let your computer or voice keyer **(MFJ-434, $179.95)** control your PTT line to free your hands for contesting and DXing.

Perfect for Boom-Mic/Headset

Plug in a boom mic/headset **(MFJ-393, $59.95)** to save the day during noisy field day or multi-operator contesting.

You can plug in your headphones and an external speaker **(MFJ-281, $12.95)**.

New!
MFJ-1263
$99.95
Ship Code A

A headphone volume control eliminates the need to readjust your rig's volume when you switch the speaker on. The headphones are always active. A push button turns the speaker on or off.

When you want to use your desk or hand mic just push a button.

Auxiliary audio input

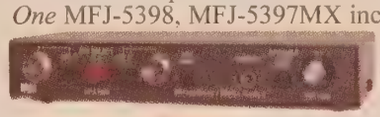
An input jack and On/Off switch is provided to insert external audio into the microphone audio input line. Great for inputting sound card, SSTV, AFSK, TNC and other audio sources.

Works with any radio

The MFJ-1263 works with any radio -- Kenwood, Yaesu, Icom, Alinco and compatible transceivers - using an 8-pin round or modular microphone jack. Internal jumpers configure the MFJ-1263 for your radio -- your mics never become obsolete! 6Wx1½Hx5D inches. Includes *one* MFJ-5398 and *one* MFJ-5397MX radio cables.

MFJ-1261
$89.95
Code A

MFJ-1261, $89.95. Like MFJ-1263 but has one mic input and two radio outputs. *One* MFJ-5398, MFJ-5397MX included.



MFJ-1260
$79.95
Code A

MFJ-1260, $79.95. Same as MFJ-1263 but has two microphone inputs and one radio output. *One* MFJ-5398 and *one* MFJ-5397MX radio cables included.

ORDER Extra Radio Cables!

MFJ-1261/1260/1263 to transceiver cables, $15.95. Order **MFJ-5398** for 8-Pin Round; **MFJ-5397MX** for 8-Pin Modular.

Save Your Voice with the MFJ Contest Voice Keyer

MFJ-434
$179.95
Ship Code A

Let this microprocessor controlled MFJ Contest Voice Keyer™ call CQ, send your call and do contest exchanges for you in your own natural voice!

Store frequently used phrases like "CQ Contest this is AA5MT", "You're 59" . . . "QTH is Mississippi" and more! Contest by pressing a few buttons and save your voice.

You can record and play back five natural sounding messages in a total of 75 seconds. EEPROM technology keeps messages stored for up to 100 years -- no battery backup needed.

You can repeat messages continuously and vary the repeat delay from 3 to 500 seconds. Makes a great voice beacon and calling CQ is so easy. A receive audio jack lets you record and play back off-the-air signals -- great help if you didn't get it right the first time! No more "Please repeat".

A playing message can be halted by pressing the Stop Button, your PTT mic button or by your VOX PTT line. A closure to ground via remote control or computer also halts messages.

Has jack for remote or computer control (using CT, NA, TR or other program and its interface). Lets you select, play and cancel messages.

The MFJ-434 is transparent to your microphone -- your mic's audio characteristics do not change when your MFJ-434 is installed. Dual controls make it easy to tailor audio level to match your voice.

All audio lines are RF filtered to eliminate RFI, audio feedback and distortion. An audio isolation transformer totally eliminates hum and distortion caused by ground loops.

It's easy to use -- just plug in your 8 pin microphone cable and plug the MFJ-434 shielded cable into your transceiver's mic connector. Internal jumpers let you customize it to Kenwood, Icom, Yaesu, Alinco or Radio Shack rigs.

Use your station or built-in microphone for recording.

Built-in speaker-amplifier lets you monitor stored messages. 3.5 mm speaker/headphone jack. SMT technology. Use 9 Volt battery, 9-15 VDC or 110 VAC with optional MFJ-1312D, $14.95. 6½Wx2½Hx6½D".

MFJ-73, $29.95. Remote Control Head with cable for **MFJ-434** lets you set the MFJ-434 out of the way.

MFJ Desk Mic/Ham Station Console

A high-sensitivity ceramic microphone element (10.5 inches with *FlexNeck*™) bends and stretches to your most comfortable operating position. A fine mesh metal grill helps to eliminate background noise.

MFJ-299 has a high quality compressor amplifier with high, medium, and low selection switches. It always sends out a constant and optimum level without distortion, regardless of audio input level.

Equipped with a built-in graphic equalizer with center frequencies of 270, 540, 1000 and 2000 Hz. Gives best audio quality for FM mode and max efficiency for SSB.

Has On-Air indicator and an output level volume control.

On-Air blinks on and off when in receiving mode and will light up continuously when transmitting.

MFJ-299 is equipped with PTT momentary and PTT lock switches that allow you to switch between long one-sided QSOs and fast two-sided conversations.

The frequency up/down switches let you operate your transceiver at your desktop microphone. 4 function keys (CALL, VFO, MR, PF) are for Kenwood transceivers only.

An output level meter lets you adjust the output level NOT to exceed 0 dB.

A revolutionary triple radio input socket makes it super easy to install for any model transceiver: Icom, Yaesu, Kenwood and compatible transceivers. See cable chart below.

Built-in battery check circuit. Press power switch and the level meter shows battery condition with power voltage for a few seconds.

MFJ-299
$99.95
Ship Code A

MFJ-297 Desk Mic

MFJ-297
$69.95
Ship Code A

MFJ-297 speech frequency tailored microphone cuts through noise and QRM. Switch for powerful SSB punch or full range broadcast quality FM/AM. Has Silibant Sound Shield™, momentary/locking PTT switch, On-Air LED, frequency up/down button, output level control and more! 4Wx11/2H6D inches with 11 inch flexible boom. 1 lb. Use 2 "AA" batteries. Select cable from chart, below.

GooseNeck™ Microphone Holder

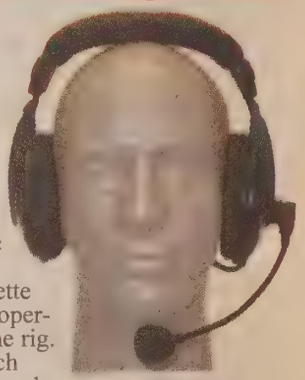
- Heavy-duty all-metal base stays put!
- *GooseNeck*™ gives super flexibility to move your mic where you want!
- Tough, Durable plastic microphone clip holds tight!
- Turns your favorite handheld microphone into a super attractive desktop mic!

MFJ-390
$14.95
Ship Code A
New!

8 Pin Round Mic Plug - $15.95 each				*8 Pin Modular Mic Plug - $15.95 each*		
MFJ Desk Mic	**ICOM**	**Kenwood**	**YAESU**	**ICOM**	**Kenwood**	**YAESU**
MFJ-297	MFJ-5397I	MFJ-5397K	MFJ-5397Y	MFJ-5397MX	MFJ-5397MX	MFJ-5397MY
MFJ-299	MFJ-5397I	MFJ-5397K	MFJ-5399Y	MFJ-5397MX	MFJ-5397MX	MFJ-5397MX

MFJ *Professional* Boom-Mic Headphones

MFJ-393
$59.95
Ship Code A



This professional grade MFJ Boom-Mic Head-phone set is for contesting, DXing and traffic nets. Comfort designed leatherette padding lets you operate for hours at the rig.

Superb 3/4 inch thick padding on each ear and headband. MFJ-393 is so super lightweight, you won't even know they're there!

Headband adjusts for perfect fit to keep out external noise. Frequency response is enhnanced for communications to bring out speech fidelity you never knew existed. Signals never sounded so clear!

The flexible microphone boom lets you position the mic comfortably at an optimum distance to minimize silibant sounds. MFJ's frequency tailored microphone element lets you bust through noise and QRM! 6 feet of cable lets you move about your ham station!

Even casual operators will appreciate the advantages of MFJ's superbly crafted Boom-Mic headphones for hands-free operating and DXing at an incredibly low MFJ price.

MFJ-393, $59.95, comes with pre-wired adapter cable. Order **MFJ-393I** for Icom and compatibles, **MFJ-393Y** for Yaesu and compatibles, **MFJ-393K** for Kenwood and compatibles. ***New!*** MFJ-393M/I/K/Y for 8 pin modular rigs. **MFJ-393MI** for Icom and compatibles, **MFJ-393MY** for Yaesu and **MFJ-393MK** for Kenwood.

MFJ-624D Hybrid Phone Patch gives crisp, clear hum-free audio

MFJ-624D
$129.95
Ship Code A

MFJ-624D *Deluxe Hybrid Phone Patch* gives you crisp, clear, hum-free audio, and that's what phone patching is all about. It's jumper selectable for Kenwood, Icom, Yaesu, and Alinco rigs with 8 pin mic connectors.

Use VOX or push-to-talk. RF pi-filters and PC board eliminates RF feedback. Use with virtually any rig. Built-in VU meter monitors phone line levels to prevent cross talk. Adjust null depth for maximum isolation between rig.

Separate XMTR /receiver gain controls eliminate need to readjust your rig after patching. *Null* control, standard phone connection, RJ-11. Jacks for speaker, audio in/audio out. 8x2x6". 12 VDC, 9V battery or 110 VAC with **MFJ-1312D, $14.95.**

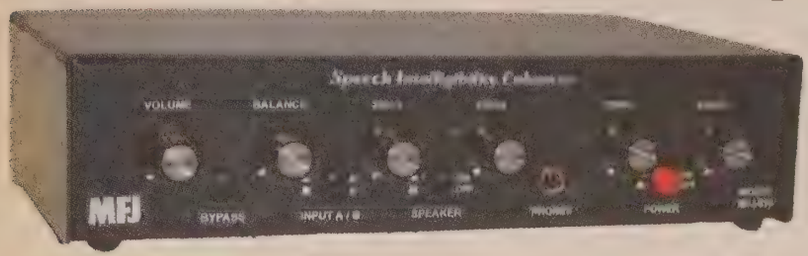
MFJ PTT Foot Operated Switch

MFJ-1709
$21.95
Ship Code A

Add the luxury of foot control PTT transceiver operation. **MFJ-1709** keeps your hands free for logging, computer operation and tuning. Greatly reduces fatigue and improves your efficiency -- could be the difference between winning and losing a contest. 2½Wx3½Dx1¼H" with non-skid pad foot pedal. 1/4 in. phone plug. Ten ft. cord.

MFJ Speech Intelligibility Enhancer

...makes barely understandable speech highly understandable!



MFJ-616
$169.95
Ship Code B

"What did you say?"

Can you hear but . . . just can't always understand what people are saying?

As we get older, high frequency hearing loss reduces our ability to understand speech. Here's why . . .

Research shows that nearly *half* the speech intelligibility is contained in 1000 to 4000 Hz range, but contains a miniscule 4% of total speech energy.

On the other hand, the low frequencies, 125 to 500 Hz have most of the speech energy (55%) but contribute very little to intelligibility -- only 4%.

To dramatically improve your ability to understand speech, you must:

First, drastically increase the speech energy above 500 Hz, where 83% of the speech intelligibility is concen-trated.

Second, drastically reduce speech energy below 500 Hz where only 4% of speech intelligibility lies.

The MFJ-616 splits the audio speech band into four overlapping octave ranges centered at 300, 600, 1200 and 2400 Hz. You can boost or cut each by nearly 20 dB.

A balance control and separate 2½ Watt amplifiers let you equalize perceived loudness to each ear so both ears help.

By boosting high and cutting low frequencies and adjusting the balanced control, speech that you can barely under-stand become highly understandable!

Even if you *don't* have high frequency hearing loss, you'll dramatically improve your ability to understand speech.

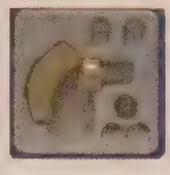
QST for April, 2001 said *"I expected a subtle effect at best, but I was astonished . . . The result was remarkably clean, understandable speech without hissing, ringing or other strange effects . . . made a dramatic improvement . . ."*

Immune to RFI. Has phone jack, on/off speaker switch, 2 inputs, bypass switch. 10Wx2½Hx6D". Needs 12 VDC.

MFJ-1316, $19.95. For 110 VAC operation. Provides 12 VDC/1.5 Amps.

MFJ-72, $58.80. *All-in-one MFJ- 616 Accessory Pack.* Includes MFJ-392B headphones, two MFJ-281 speakers and MFJ-1316 power supply. ***Save $7!***

MFJ CyberEAR™!



MFJ-388
$29.95
Ship Code A

Tiny powerful MFJ *CyberEar*™ plugs in and loops over ear -- captures and amplifies sounds by 12 dB! Extends your hearing range, helps you hear every word at hamfests and club talks -- even if you're on the back row! Great for eyeball QSOs. Volume control, on/off switch. For left or right ear. 3 interchangeable ear plugs. Flesh color -- hardly noticeable. Super lightweight -- 10 grams with battery! Includes batteries. Hear even better -- buy one for each ear! 30 day money back if not absolutely delighted. Not a hearing aid.

Super CyberEAR™

MFJ-389
$59.95
Ship Code A

Hear everything! Capture and amplify sounds up to 50 dB! Left or right ear plugs, volume control, extremely small. Not a hearing aid.

MFJ Audio Products for Better Communication

MFJ Cleartone™: Our most Popular Speaker

MFJ-281
$12.95
Ship Code A

Plug in this MFJ *Clear Tone*™ speaker and bring out speech fidelity that you never knew existed. **MFJ-281** restores the smooth sound of sinewaves that CW naturally generates and makes it easy to understand and copy.

The MFJ-281 *ClearTone*™ speaker was carefully designed to improve the intelligibility of speech in the frequency range of 600 to 4000 Hz while reducing undesirable noise, static and hum.

3-in. speaker handles 8 Watts. 8 Ohms impedance, has six feet of cord terminated with a 3.5 mm mono plug.

Tiny, compact 3¾x3x2¼ inches, but powerful booming sound!

MFJ Compact Mobile Speaker

MFJ-280
$19.95
Ship Code A

Enjoy superb audio and convenience with this economical mobile speaker.

Matches 8 and 4 ohm impedances. Handles 3 Watts. 30-in cord lets you get it to your rig's speaker output. Tiny 2½x2x3 inches fits anywhere. Tough ABS plastic cabinet is built to last.

MFJ Deluxe Communication Station Speaker

MFJ brings you ultra high quality communication audio with ham radio's most advanced communication speaker.

How? By using *America's most modern speaker design, advanced speaker cone and voice coil materials and construction, and a carefully crafted, accoustically-rigid cabinet.*

Handsome cabinet measures 6¼Wx10Hx7D in. You won't believe the clarity and depth of the audio when you hear the incredible improvements in speech intelligibility and CW tone. 4-in. full range speaker.

It also reduces listening fatigue. It can literally transform your transceiver!

MFJ-385
$39.95
Ship Code B

The smooth, wide range response of the MFJ-385 gives you faithful reproduction with no hint of unwanted resonances and sound coloration. Speech becomes more intelligible and easier to understand.

Pure sine wave tones of CW make copying and tuning in signals easier and faster.

Amplified *ClearTone*™ Speaker

MFJ-382
$39.95
Ship Code A

MFJ's Deluxe *ClearTone*™ speaker is an excellent 1-watt amplified speaker for many uses.

The MFJ-382 gives superb, loud and powerful *ClearTone*™ audio. Speaker is 3-in. diameter.

Adjustable from barely audible to high volume, this rugged speaker is sturdy and compact. All metal cabinet with rubber feet. 3½x1¾x4½ in. 9 volt battery (not included) or 110 VAC with **MFJ-1312D, $14.95.**

MFJ Shortwave Radio Communication Headphones

MFJ-392B is perfect for amateur radio and shortwave radio listening. Great for all modes -- SSB, FM, AM, data and CW.

Each earphone its own volume control.

Superb padded headband and *ear cushioned* design makes listening extremely comfortable.

You'll forget they're even on as you listen to stations all over the world!

High-performance driver unit reproduces enhanced communication sound. Signals never sounded so *crystal clear!*

Bring out speech fidelity you never knew existed. Has free ¼ inch phono adaptor.

Has gold plated plug and cord. Super lightweight earphones (8 ounces) come with 9 feet of cord for roaming around.

MFJ-392B handles 450 mW and has a frequency response of 20-20,000 Hz.

Impedance is 32 ohms, sensitivity is 102 dB/mW.

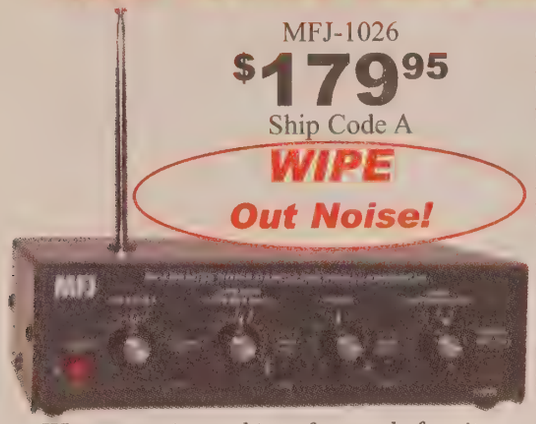
Works in stereo mode with 3.5 mm plug. Works mono with 1/4 inch adapter.

MFJ-392B
$19.95
Ship Code A

MFJ *Noise-Canceling* Filters Wipe Out Interference

MFJ-1026
$179.95
Ship Code A

WIPE Out Noise!



Wipe out noise and interference before it gets into your receiver with a 60 dB null!

Eliminate all types of noise -- severe power line noise from arcing transformers and insulators, fluorescent lamps, light dimmers, touch controlled lamps, computers, TV birdies, lightning crashes from distant thunderstorms, electric drills, motors, industrial processes.

It's more effective than a noise blanker because interference much stronger than your desired signal can be completely removed without affecting your signal.

It works on all modes -- SSB, AM, CW, FM, frequences from BCB to lower VHF.

Null out strong QRM on top of weak rare DX and then work him! You can null out a strong local ham or AM broadcast station to prevent receiver from overloading.

Use MFJ-1026 as an adjustable phasing network. You can combine two antennas to give you various directional patterns.

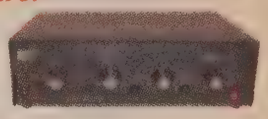
Null out a strong interfering signal or peak a weak signal at a push of a button.

Easy-to-use! Plugs between transmitting antenna and transceiver. To null, adjust amplitude and phase controls for minimum S-meter reading or lowest noise. To peak, push reverse button.

Use built-in active antenna or an external one. MFJ's exclusive *Constant Amplitude Phase Control*™ makes nulling easy.

RF-sense T/R switch automatically bypasses your transceiver when you transmit. Adjustable delay time. 12 VDC or 110 VAC with **MFJ-1312D, $14.95**. Measures 6½X1½X6¼ inches.

MFJ-1025, $159.95.



Like MFJ-1026 less built-in active antenna, use external antenna. Same size, power requirements.

MFJ *Tunable, Programmable* Brick Wall DSP Filter

***MFJ's tunable super DSP filter* automatically eliminates heterodynes, reduces noise and interference simultaneously on SSB, AM,CW, packet, AMTOR, PACTOR, RTTY, SSTV, WeFAX, FAX, weak signal VHF, EME, satellite.**

MFJ-784B
$249.95
Ship Code B

You get MFJ's tunable FIR linear phasse filters that minimize ringing, prevent data errors and have "brick wall" filter response with up to 57 dB attenuation 75 Hz away.

Only MFJ gives you 5 tunable DSP filters. You can tune each lowpass, highpass, notch, and bandpass filter including optimized SSB and CW filters. You can vary the bandwidth to pinpoint and eliminate interference.

Only MFJ gives you 5 factory pre-set filters and 10 programmable pre-set filters that you can customize. Instantly remove QRM with a turn of a switch!

MFJ's automatic notch filter searches for and eliminates multiple heterodynes.

You also get MFJ's advanced adaptive noise reduction. It silences background noise and QRN so much that SSB signals sound like FM.

The automatic notch and adaptive noise reduction can be used with all relevant tunable pre-set filters.

Automatic gain control (AGC) keeps audio level constant during signal fade.

Tunable bandpass filters

Narrow band signals like CW & RTTY jump out of QRM when you switch in MFJ's tunable FIR bandpass filters.

You can tune the center frequency from 300 to 3400 Hz, and vary the bandwidth from 30 Hz to 2100 Hz -- from super-tight CW filters to wide razor-sharp Data filters.

You can use two tunable filters together. For example, tune one to mark, one to space and set bandwidth tight for a super sharp RTTY filter.

You can tune the lower cutoff frequency 200 to 2200 Hz and the upper cutoff frequency 1400 to 3400 Hz. This lets you create custom filters for voice, data and other modes. Signals just 75 Hz away literally disappear -- they are reduced 57 dB!

Automatic notch filter

MFJ's automatic notch filter searches for and eliminates multiple heterodynes in milli-seconds. It's so fast, that even interfering CW and RTTY signals can also be eliminated. Selectively remove unwanted tones using the two manually tunable notch filters -- an MFJ exclusive. Knock out unwanted CW stations while you're on CW.

Adaptive Noise Reduction

Noise reduction works in all filter modes and on all random noise -- white noise, static, impulse, ignition noise, power line noise, hiss.

The LMS algorithm gives you up to 20 dB of noise reduction. Noise reduction is adjustable to prevent signal distortion.

15 Pre-set filters, or customize

You can select from 15 pre-set filters. Use for SSB, AM, CW, packet, AMTOR, PACTOR, RTTY, SSTV, WeFAX, FAX or any mode.

If you don't like our pre-set filters, you can program your own -- an MFJ exclusive! Save center frequency/bandwidth, lowpass/highpass cutoffs, auto/manual notch, noise reduction -- all filter settings -- in 10 programmable filters.

More MFJ DSP Filter Features

MFJ's *tunable Spotting Tone*™ -- accurately tunes even the narrowest CW filter.

MFJ's exclusive *Adaptive Tuning*™ -- tuning rate automatically becomes finer as you narrow bandwidth -- makes narrow filters easy-to-use.

MFJ's exclusive *FilterTalk*™ -- sends precise filter settings in Morse code.

Automatic notch with variable aggressiveness, quieter 2½ Watt audio amplifier, speaker switch keeps phones always active.

Manual and auto notch can be used together. Noise reduction, automatic notch & custom filter saved in memory is selected.

Accurate easy-to-use input level indicator, improved manual notch in the CW mode, adjustable line level output, more Mark-Space frequencies and baud rates for data filters and automatic bypass during transmit for monitoring CW sidetone, voice/data by sensing the PTT line.

A push-button bypasses your filter -- lets you hear the entire unfiltered signal.2½ W amplifier, volume control, input level control, speaker jack, PTT sense line, line level output. Measures 9½x2½x6 inches.

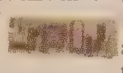
Plugs between your transceiver or receiver and external speaker or headphones. 12 VDC or 110 VAC with **MFJ-1312D, $14.95.**

Cable Pack, MFJ-5184, $7.95.
Includes receiver cable, DC cable, 2 open-end TNC cables and power plug.

Add DSP to any Multimode

MFJ-781, $129.95. Add DSP filtering to any TNC/multmode data controller. Copy signals buried in QRM. AGC, On/Off Bypass. Plugs between rig & multimode. 4½x2½x5".

MFJ-780, $99.95. "Brick Wall" DSP filtering for MFJ-1278/B multi-mode. Copy signals that other multi-modes can't. *Soldering is required for this plug-in board.*



MFJ's SSB/CW Audio Filters

MFJ-752C, $99.95. All mode dual tunable filter has variable bandwidth 40 Hz to almost flat, eliminates noise and heterodynes notch depth to 70 dB, inputs for two rigs, selectable, noise limiter, plus more. MFJ-752C measures 10x2x6 inches.

MFJ-722, $79.95. MFJ SSB/CW tunable 70 dB notch filter. Has 8 poles active IC filtering, uses cascaded low-Q stages. 3 bandwidths: 80/110/180 Hz. Center frequency: 750 Hz. Up to 15 dB. 5½x2½x5".

MFJ-751B, $69.95. Zero in SSB/CW with tunable peak/notch filters. Tune 300-3000 50 dB notch. Tiny 1¾x4¾x5 inches fits anywhere.

MFJ-890 DX Beacon Monitor

Get up-to-the-minute worldwide DX band conditions in minutes on 14, 18, 21, 24, 28 MHz bands using the International Beacon Network of 18 transmitters around the world!

MFJ-890
$99.95
Ship Code A

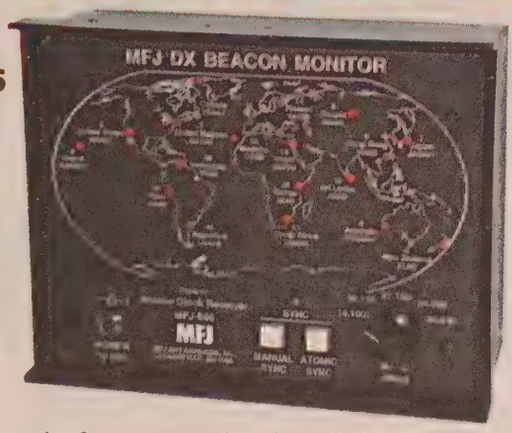
MFJ's DX Beacon Monitor lets you see which beacon you're hearing on your transceiver -- an LED lights on its world map to show you the beacon location and where to point your antenna.

It's fascinating to hear and watch each beacon location light up as they become active across the world. Great for DXers, contesters, ragchewers and SWLers.

The *International Beacon Network* provides a reliable source of signals for determining HF propagation 24 hours a day.

It consists of 18 beacons around the world. Each beacon transmits on 14.1, 18.11, 21.150, 24.93 and 28.2 MHz. The transmit sequence moves westward from New York across North America, Asia, Pacific to Africa, Europe, South America.

On each frequency, each beacon transmits for ten-seconds -- its call sign at 22 wpm CW and a one-second dash at 100 watts and three one-second dashes at 10, 1, and 0.1 watts.



When each beacon completes a transmission it goes silent on that band and switches to the next higher band.

For more information see Oct/Nov, 1994, Sept, 1997 *QST* and Jan 1999, Sept/Dec 2001, Jan 2002 *Practical Wireless* of U.K.

The more beacons you hear, the more open the band is to different parts of the world.

The more dashes you hear per beacon, the better the quality of propagation and the more robust the band is. If you hear the 100 milliwatt dashes from many beacons you know *the band is wide open!*

***In** just three minutes* you'll know how band conditions are worldwide.

You don't have to copy CW at 22 wpm to identify a beacon. As you *hear* a beacon, an LED instantly lights on a world map to show you its location. You can positively identify each beacon -- even if the signal is weak, fluttery or distorted.

The *MFJ DX Beacon Monitor* has a *built-in WWVB atomic clock receiver* to provide ultra precise synchronization with the GPS-synchronized beacons. You also may manually sync the Monitor (the Monitor is not a receiver).

MFJ-890 is a self-contained standalone unit. 6¾Wx5¼Hx3D". Use 12 VDC or 110 VAC w/optional MFJ-1312D, $14.95. No antenna/radio connection required.

MFJ-890UK, $99.95 (for England).

MFJ Micro ATV Transmitter

Transmits Live Pictures on Cable TV Channels

MFJ-8708
$159.95
Ship Code A

This tiny *MFJ Micro ATV Transmitter*™ lets you transmit a high quality Amateur Television video signal on 433.97 MHz (cable channel 58, 59, or 60). All you need to do is plug in an antenna and a video source -- your camcorder, camera, VCR or other video source.

With an antenna and a TV set (or down converter/ TV) tuned to cable channel 58, 59, or 60, you'll have a *complete ATV video station.*

The MFJ-8708 puts out a solid 50-100 mW signal, capable of transmitting up to 1.8 miles with a 3-element beam. By using a suitable UHF power amplifier and high-gain antenna, you can enjoy two way ATV communications over many, many miles with fellow ATV hams.

To transmit video simply connect video to the RCA phono connector and antenna to the BNC connector and connect a 9 volt battery or other 9 VDC source.

You can use any standard NTSC or PAL composite video (1V pk-pk) source.

The MFJ *Micro ATV Transmitter*™ can only be operated by a Technician class or higher licensed Radio Amateur. All transmissions must be directed to at least one other licensed Radio Amateur.

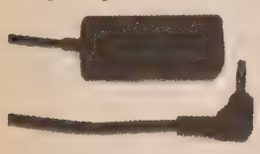
MFJ-8708, 4 channel, cable channels 58, 59, 60 and test channel. Weight only 1½ ounces, less battery. Has audio and video inputs.

MFJ-8704
$119.95
Ship Code A

MFJ-8704, cable channel 59 video only. Weighs only one ounce, less battery (battery, quarter not included).

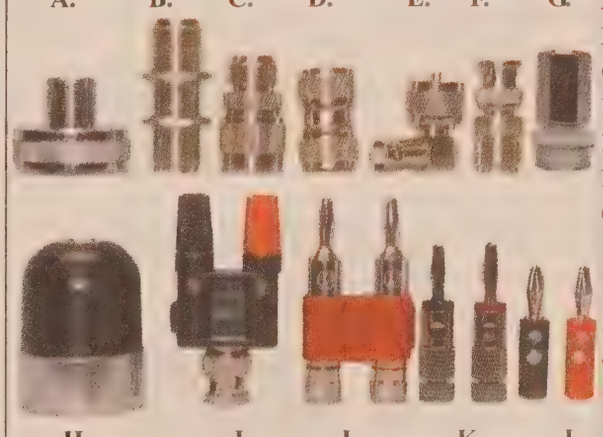
Audio Cable Accessories

MFJ-5302, $9.95. 3.5 mm stereo corded audio extension cord and adapter set. Has 3.5 mm stereo splitter (Y), 3.5 mm stereo plug to 1/4 phone stereo plug, 3.5mm mono plug to 2.5 mm mono plug, and 2.5 mm mono plug to 3.5 mm mono plug adapters.



MFJ-5300, $4.95. 3 foot, 3.5 mm stereo extension cord with volume control. Can use for headphones on radio speaker output to set audio level to external devices. Pocket clip for portable use.

MFJ Connectors, Plugs, Adaptors and such . . .



A. **MFJ-7706, $9.95,** NMO to SO-239
B. **MFJ-7701, $3.95,** SO-239 to SO-239
C. **MFJ-7705, $4.95,** N male to SO-239
D. **MFJ-7702, $2.95,** PL-259 to PL-259
E. **MFJ-7703, $6.95,** PL-259/BNC RT angle
F. **MFJ-7708, $2.95,** BNC male to SO-239
G. **MFJ-7714, $3.95,** Chassis mount 3/8x24 antenna connector with insulating washer.
H. **MFJ-7707, $7.95,** 3/8x24 to NMO
I. **MFJ-7704, $6.95,** BNC to dual banana
J. **MFJ-7709, $5.95,** dual banana, high-current
K. **MFJ-7713, $4.95,** one red, one black high current banana plug.
L. **MFJ-7700, $5.95,** 6-pair banana, black, red.

Indoor *Tuned* Active SWL Antenna Covers 0.3 to 40 MHz

MFJ invented the tunable active antenna! New technology uses cascode FET/bipolar transistor and a gigahertz bandwidth buffer

MFJ invented the tunable active antenna! Numerous copies have been made without success -- including most recent ones.

Why? Because MFJ has made continuous improvements where others have not. The MFJ-1020C has been completely redesigned with new technology.

New technology uses a cascode FET/bipolar transistor and a gigahertz bandwidth buffer.

It improves gain and selectivity, reduces noise and intermod, and is NOT prone to self-oscillations that can severely damage your receiver.

With the MFJ-1020C tuned indoor active antenna you'll rival reception of outside wire antennas hundreds of feet long and pick up signals loud and clear from all over the world.

World Radio TV Handbook says MFJ-1020 is a *"fine value . . . fair price . . . best offering to date . . . performs very well indeed."*

MFJ-1020C
$79.95
Ship Code A

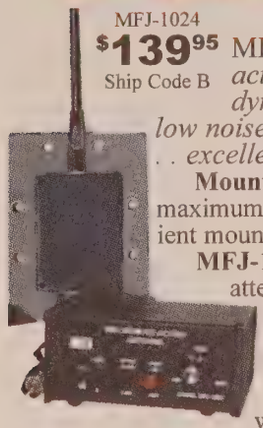
MFJ's unique tuned circuitry minimizes intermod, improves selectivity and reduces noise outside the tuned band. You can also use it as a tuned preselector with an external antenna.

Covers 0.3 to 40 MHz including VLF, AM broadcast, all shortwave and all amateur radio bands.

Has Tune, Band, Gain, On-Off/Bypass controls and SO-239 coax connectors. Use 9 volt battery, 9-18 VDC or 110 VAC with **MFJ-1312D, $14.95**. 6Wx2Hx5D inches. Includes telescoping whip.

54" Active Outdoor Antenna

MFJ-1024
$139.95
Ship Code B



World Radio TV Handbook says MFJ-1024 is a *"first rate, easy-to-operate active antenna . . . quiet . . . excellent dynamic range . . . good gain . . . very low noise factor . . . broad frequency coverage . . . excellent choice . . ."*

Mount it outdoors away from electrical noise for maximum signal and minimum noise. Has convenient mounting holes for easy installation.

MFJ-1024 covers 50 KHz to 30 MHz. 20 dB attenuator, gain control, ON LED.

Switch selects two receivers and auxiliary or active antenna. **Control** unit measures a compact 6Wx3Hx5D inches.

Remote unit has a 54-inch telescopic whip, 50 feet of coaxial line and PL-259 connector. Measures 3Wx2Hx4D inches. Use 12 VDC or 110 VAC with **MFJ-1312D, $14.95**.

Compact 0.3 to 200 MHz antenna

MFJ-1022
$49.95
Ship Code A

Your ham band only antenna does great on the ham bands . . . but this MFJ all band active antenna will help you hear strong signals from all over the world from 300 KHz to 200 MHz -- including low, medium, shortwave and VHF bands.

Enjoy shortwave newscasts, ship-to-shore, airline, commercial RTTY and others.

It also improves weak noisy scanner radio reception from high to low band VHF -- hear signals you couldn't hear before.

A J-310 FET handles strong signals and noiseless feedback circuit gives you excellent low noise reception. 4.5 GHZ MRF-901 transistor lets you receive weak signals well into VHF.

On/off switch, power on LED, SO-239 coax connector and detachable 20 inch telescoping antenna. 9 volt battery or 110 VAC with **MFJ-1312D, $14.95**. Measures 3Wx1¼Hx4D inches.

High Dynamic Range *Passive Preselector* Can't Overload

MFJ-1046
$99.95
Ship Code A

MFJ's new Passive Preselector has extremely high dynamic range! It improves the performance of nearly any HF or shortwave receiver/transceiver. It vastly improves the most expensive receiv- ers. Especially helpful to those with broadband front-ends that are prone to overload.

Protects your sensitive receiver input from damage (including switching diodes and attenuator resistors) caused by very strong signals from multi-transmitter, multi-band operation -- contests, field-day, nearby hams, CBers, TV/FM/AM stations.

It eliminates phantom signals by suppressing strong out-of-band signals that cause intermod, blocking and cross modulation. Completely eliminates second order intermod problems.

MFJ's unique Hi-Q series tunable circuit gives you superb performance.

The tunable series tuned circuit works into a very low impedance formed by broadband toroid transformers.

Has narrow bandwidth, excellent stopband attenuation, very low loss, constant bandwidth and gain over each band.

Excellent attenuation in adjacent bands.

The entire 1.6 to 33 MHz HF band is covered in five overlapping bands.

An air variable tuning capacitor, 1.8 to 1 tuning range and a vernier reduction drive gives you precision tuning.

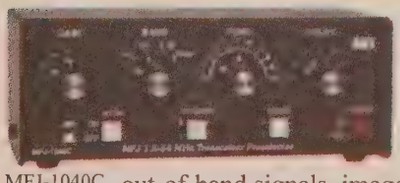
Measures 7½x2½x3¼". Use 12 VDC or 110 VAC with **MFJ-1312D, $14.95**.

MFJ-1048, $119.95.

Same as MFJ-1046 but *adds* an RF sense transmit/ receive switch with adjustable time delay to automatically bypass your MFJ-1048 when you transmit.

Also adds PTT line T/R switching; connects between antenna and transceiver. Use 12 VDC or 110 VAC with **MFJ-1312D, $14.95**

MFJ All-Band Preselector



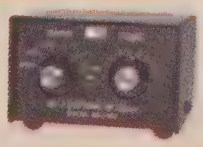
Lets you copy weak signals. Rejects out-of-band signals, images. 1.8 to 54 MHz. Up to 20 dB gain. Gain control. Uses a cascode FET/bipolar transistor for low noise, high gain. 20 dB attenuator. Connect 2 antennas, 2 receivers. SO-239 connectors. Automatic bypass when when transmitting to 125 watts. Jack for push-to-talk. 9-18 VDC or **MFJ-1312D. $14.95**.

MFJ-1040C
$99.95
Ship Code A

LW/MW/SW Preselector/Tuner

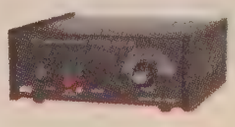
MFJ-956 boosts favorite stations while rejecting images, intermod and phantom signals.

MFJ-956
$49.95
Ship Code A



Greatly improves reception from 0.15 to 30 MHz, especially below 2 MHz. Tuner bypass/ground receiver positons. 2x3x4 in.

MFJ-1045C, $69.95. No attenuator, transceiver auto bypass, delay, or PTT.



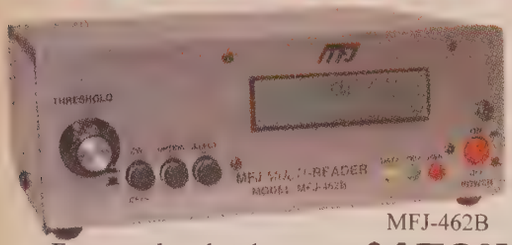
Receiver Antenna Tuner/Preamp

Don't miss rare DX due to signal power loss between your receiver and antenna. The MFJ-959C provides proper impedance matching to transfer maximum signal from antenna to receiver.

MFJ-959C
$99.95
Ship Code A

Covers 1.6 to 30 MHz. 20 dB preamp with gain control boosts weak stations. 20 dB attenuator prevents overload. Select from 2 antennas and 2 receivers. Measures 9x2x6 inches. Use 9-18 VDC or 110 VAC with optional adapter, **MFJ-1312D,** $14.95.

Multireader™ Taps Into Secret Signals



MFJ-462B
$179.95
Ship Code A

Ever wonder what those mysterious chirps, whistles, and buzzing sounds are on the shortwave bands?

Much of it is RTTY, ASCII, CW and AMTOR (FEC) signals passing commercial, military, diplomatic, weather, aeronautical, maritime, amateur and other traffic.

Tap into these "secret" signals

Plug this self-contained MFJ *MultiReader*™ into your shortwave receiver's earphone jack. Then watch these mysterious signals turn into exciting text messages as they scroll across an easy-to-read LCD display. No computer, interface, special cables or other equipment is needed.

Eavesdrop on the latest breaking news as press agencies from all over the world relay them on RTTY -- it's like having a private wire service in your home. Copy RTTY weather stations from Antarctica, Mali, Congo and many others.

Listen to military traffic passing from Panama, Cyprus, Peru, etc. Catch diplomatic, research, commercial and maritime traffic. Listen to maritime users, diplomats and amateurs send and receive error free messages using various forms of TOR (Telex-Over-Radio).

Monitor Morse code communications from hams, military, commercial, aeronautical, diplomatic and maritime coastal stations from around the world.

There's plenty of exciting non-voice traffic on shortwave that'll keep you fascinated . . . traffic you can't read unless you have a decoder.

Printer monitors 24 hours a day

MFJ's exclusive *TelePrinterPort*™ lets you monitor any station 24 hours a day by printing their transmissions. Plug your Epson compatible printer into the MFJ-462B printer port and you're ready to print. **Save** several pages of text in 8 K of memory for later review or re-reading.

Consistently get solid copy from MFJ's high performance *PLL* (phaselock loop) *modem technology*. Digs out weak signals buried in noise and even tracks slightly drifting signals. Mark and space tones are copied to give you greatly improved decoding under adverse conditions.

Easy to use, tune and read

Just push a button to select modes and features from a menu. A precision tuning indicator makes tuning your receiver for best copy on all modes quick and easy.

The 2 line 16 character LCD display has contrast adjustment. One line comes in at speed of signal, second line is delayed so you catch every exciting word!

Copy most standard shifts and speeds in all modes. MFJ's *AutoTrak*™ automatic Morse Code speed tracking helps MFJ-462B to track and decode high speed CW.

MultiReader™ Accessories

Use 12 VDC or use 110 VAC with MFJ-1312D AC adapter, $14.95. MFJ-462B measures 6¼Wx2½Hx6¼D inches.

MFJ-5162, $5.95. *Receiver cable* connects MFJ *MultiReader*™ to your radio's external speaker (3.5mm jack).

MFJ-5412, $9.95. *Printer Cable* is 25-pin cable for Epson compatibles.

MFJ-5163, $8.95. Speaker "Y" cable.

MFJ-5300, $4.95. Three foot, 3.5 mm stereo extension cord with volume control. Can use for mono radio speaker output to set audio level to external devices. Has pocket clip for portable use.

MFJ Shortwave Regenerative Receiver Kit

MFJ-8100K
$69.95
Kit
Ship Code A

Remember hunching over your regenerative receiver for hours with a pair of phones pressing uncomfortably against your ears?

You could hear just about anything that fancy superhets could hear. Sure, you had to play around with the regeneration control just right and have a steady hand to tune but you could hear 'em

Don't you wish you could relive some of this fun and excitement of your youth -- share some of it with your kids and grandkids? Well, you can -- with the MFJ-8100 World Band Shortwave Radio Kit.

Spend a fun evening with your child or grandchild and help him put this simple kit together. When the two of you finish, watch his glow of excitement as he tunes the world

bands -- just like you did -- and remember for life. It might even inspire him into a career in electronics.

This baby performs. A RF stage really picks up the weak ones and it goes into regeneration smoothly without pops or dead spots. Stations all over the world will come in loud and clear with a 10 ft wire antenna.

With a 10 foot wire antenna, you'll be amazed at what you can hear -- stations all over the world will come in loud and clear.

Listen to international shortwave broadcasts, hams on SSB and CW, WWV, RTTY, packet and much more. Covers all or part of 75/80, 49, 40, 30, 31, 20, 25, 22, 19, 17, 16, 15, 13 Meters in five bands.

Range A covers: 3.51-4.31 MHz, Range B: 5.95-7.40 MHz, Range C: 9.56-12.05 MHz, Range D: 13.21-16.4 MHz, and Range E: 17.6-22 MHz.

Has vernier reduction drive, bandswitch, volume/RF gain controls, uses 9V battery and built into a rugged aluminum cabinet.

Two earphone jacks let you and your child or grandchild listen together with your Walkman style earphones or plug-in speakers. Measures 7x6x2½ inches.

MFJ-8100W, $89.95, wired and tested.

Convert AM/FM Radio to Receive Shortwave

MFJ-306
$89.95
Ship Code A

MFJ-306 turns your AM/FM car radio into a World Band receiver at the push of a button. Unlike local FM and AM radio stations that fade out after a few miles, enjoy shortwave throughout your entire trip.

MFJ-306 covers the entire 19, 25, 31, and 49 Meter international shortwave broadcast bands. You'll hear stations all over the world at various times -- Europe, Middle East, Asia, Australia, more!

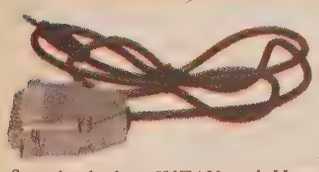
It's easy to install. Just unplug your car radio antenna and plug it into the MFJ-306. Then insert the MFJ-306 cable into your radio antenna jack and connect 12 VDC.

Measures just 5x1½x3½ inches -- fits almost anywhere in your vehicle. Push button selects world band or AM/FM. Excellent sensitivity and selectivity when used with your auto receiver. Standard Motorola antenna plug and jack.

Airband or Marine/Weather

MFJ-8218, $39.95. PLL Digital Auto Tuning with frequency up/down buttons, 30 preset memories -- 10 for the Air-Band! Built-in (mono) speaker, built-in telescopic antenna, Low Battery Indicator, Key-Lock Function, more. **AIRBAND:** 108.000-140.000 MHz in 25 kHz steps. Uses two AA batteries (not incl.) or 3 VDC jack for external power. Fits in the palm of your hand! **MFJ-8214, $39.95.** Like above, but is Marine/Weather Receiver.

Multimode Computer Interfaces -- Decode RTTY, ASCII, CW and More!

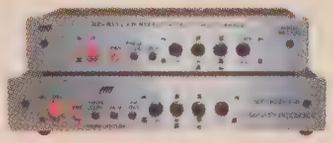


MFJ-1213
$49.95
Ship Code A

MFJ-1213 computer interface includes *JVFAX* and *HamComm* software. Receives and decodes multimode digital data with your rig. Color FAX/SSTV pictures, Baudot, ASCII, AMTOR, ARQ/FEC, SITOR, NAVTEX, SHIP and SYNOP.

MFJ-1214PC
$149.95
Ship Code A

MFJ-1214PC, is a complete package, receives and transmits RTTY, ASCII, CW, also WeFAX weather maps with all 16 gray levels. Complete package includes software, power supply & cables.



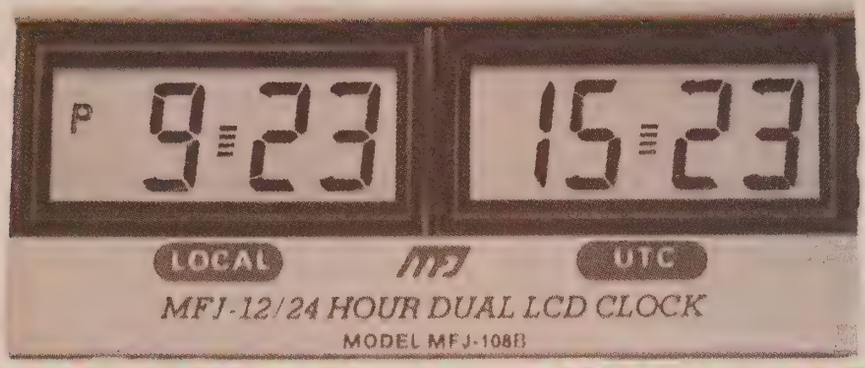
MFJ-1224, $99.95. Turns IBM compatible into a RTTY/ASCII/CW station for transmit/receive with HF/VHF rig. Has tuning indicator, normal/ reverse switch.

MFJ- 1285, $19.95. MFJ-1224 DOS software.

MFJ-1225, $69.95. Receive only unit.

MFJ- 1285B, $19.95, MFJ-1225 DOS software.

MFJ 24/12 Hour Clocks



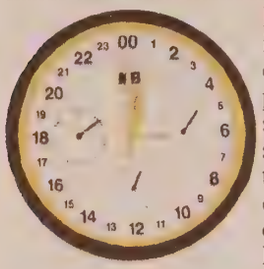
Dual Displays: 24 and 12 Hour Clock

MFJ-108B
$19.95
Ship code A

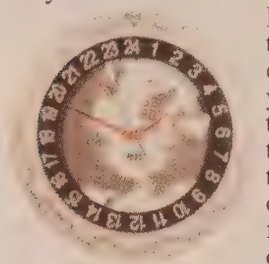
MFJ-108B dual clock has separate 24 hour and 12 hour displays. Lets you read both UTC and local time simultaneously. Features huge high-contrast 5/8 inch LCD numerals that makes it easy to read across the room. Mounted in attractive solid brushed aluminum frame with sloped face for easy viewing. Synchronizable to WWV for split-second timing. Quartz controlled for excellent accuracy. Long life button battery included. 4½Wx1D x2H". MFJ one year limited warranty.

DXer's Wall Clocks

MFJ-135, $39.95. 12 inch world time Quartz clock gives five time zones in a single glance. UTC, Local, Honolulu, Tokyo, and Moscow. 5 independently settable dials. Highly visible, easy-to-read. Black outer trim, gold inlet with gold hands and black numbers, beautiful white face.

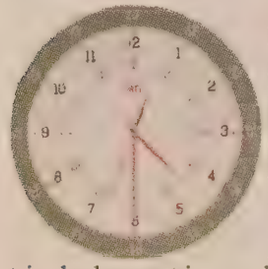


MFJ-125, $29.95. 12 inch DXer's Quartz wall clock gives 24 hour time plus more. Has three smaller independently settable dials for 12 hour time, day of week and date. No more day/ date confusion when logging DX! Highly visible, easy-to-read dials! Seconds hand.



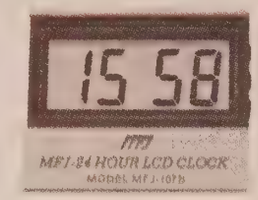
MFJ-115, $24.95. Set this 24 hour Quartz clock to UTC/ GMT and you can determine the time in any time zone of the world at any time of the day. Premier world cities encircle its colorful world map face to indicate time zone. 12 inch face is easy to see across room. Seconds hand.

MFJ-105C, $19.95. *This is the world's most popular ham radio wall clock!* True 24 hour Quartz movement. Huge 12 inch black face with large white numerals give excellent visibility across room. Attractive gold colored hour, minute and seconds hands looks great on any wall!



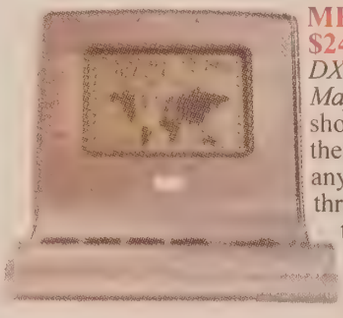
MFJ-126, $24.95. 12 hour Quartz movement gives 12 hour time on inner dial (for XYL) and 1200 to 2400 hour time on its outer dial (for you). Attractive clean, white face is highly visible. Has a real glass cover! Handsome hunter green trim looks great in any decor. Has seconds hand.

Hi-Contrast LCDs



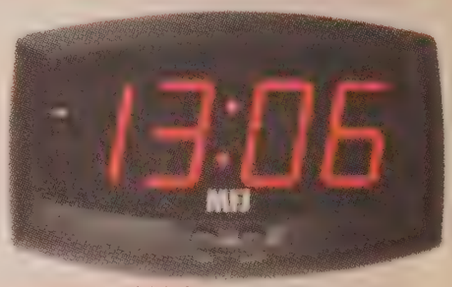
MFJ-107B, $9.95. 24 hour UTC Clock has large 5/8 inch LCD numerals. 2¼x1x2 inches. Synchronizable to WWV. Solid brushed aluminum frame lasts for years. Long life button battery included.

MFJ-118, $24.95. **MFJ's** *Jumbo LCD*™ shows time in 24 UTC or 12 hour format with huge 1¼" *high-contrast* LCD digits. 5¾Wx2½Hx½D in. Also has year, month, date, and day of week. Choose English, Spanish, German or French for day-of-week display. Easy-to-operate. Has 100 year full calendar. Quartz controlled for excellent accuracy. Manually snchronize to WWV. Black scratch resistant case. Mounting holes for wall mount/flip stand for desk mount. Use "AAA" battery (not included).

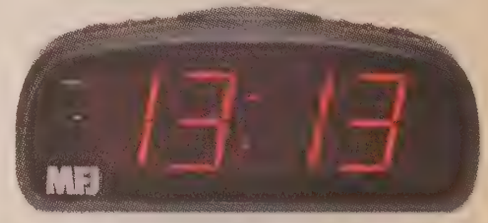


MFJ-112B, $24.95. This *DXers World Map Clock* shows you the time at any QTH throughout the world on an attractive LCD world map. Also shows day of week, month, date and year. Time displays hour/minute/second. Choose 12/24 Hour. Easy push-buttons move you east and west on the map to display a QTH in every time zone. Daylight saving time feature. Attractive grey. *Cool blue* backlight for night viewing. Great for gift or use as logging clock. 4½Wx3⅜Hx2¼D in. 1 year *No Matter What*™ limited warranty.

Bright LED Clocks



MFJ-117, $39.95.
This 12/24 hour clock has the biggest and brightest LEDs of any clock we have ever seen! Giant *2.5 inch* super bright LEDs are nearly the width of a 2-Meter HT -- you can see them from across the street, day/night! Perfect for decreasing eyesight. 12/24 hour switch. Wall/desk mount. Black with bright red LEDs looks great! 12Wx7½H in. Use 9V battery for backup. Front panel hour/minute set buttons. 110 VAC, 60 Hz.



MFJ-113, $19.95.
Switchable 12/24 hour display with *HUGE* 1.8" red LEDs. Absolutely shines from across the room. Super compact 11Hx9Wx2½D inches. Has 9 minute ID timer, alarm, 9V battery back-up. Use 110 VAC, 60 Hz. Great clock for the sight impaired!

12 Vdc LED Mobile Clock

MFJ-116DC, $19.95.
12 VDC, plugs in cigarette lighter. Huge .562 inch green LCD digits! *Great for motorhomes and truckers!* 12 hour only. Attractive black cabinet, long cord.

MFJ ATOMIC 24/12 HOUR CLOCKS

• Automatically receive WWVB radio signal from National Institute of Standards and Technology in Ft. Collins, Colorado for millisecond accuracy • Choose 24/12 Hour time format or simultaneous dual times • Choose from huge selection of wall, desk mounts

MFJ Atomic Alarm Clock -- SUPER DEAL!

An unbelievable number of features for such a low price!

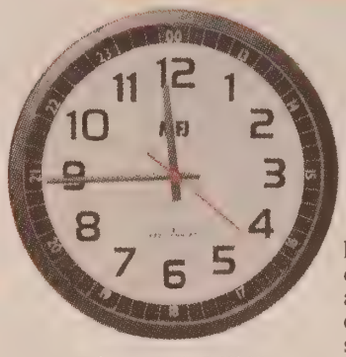
MFJ-132RC
$14.95
Ship Code A

NEW!

FEATURES:

- **Huge 0.563-inch height LCD digits**
- **Receiver set at 60 kHz for WWVB**
- **24/12-hr selectable, running seconds display**
- **Dual Alarm**
- **5-Minute ID (Snooze)**
- **Fabulous backlight**
- **Month and Date Display**
- **Indoor Thermometer (*Range 32 to 122 Degrees Fahrenheit*).**
- **Uses two AA 1.5V Batteries (not incl).**
- **1 Year *NoMatterWhat*™ Limited warranty**

12-inch Atomic 24/12 Hour Wall Clock

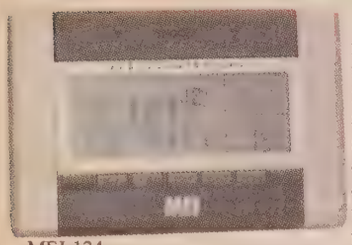


MFJ-131RC
$59.95
Ship Code A

This huge 12-inch diameter atomic wall clock can be seen from across the room! It'll liven up any ham-shack wall and it automatically receives the WWVB signal from Ft. Collins, Colorado. Has both 12 and 24 hour time format displays. Has second hand with clearly marked seconds display points. Attractive, clean white, *real* glass face is highly visible and will improve the decor of any room.

Desk Mount Atomic 24/12 Hour LCD Clocks

Atomic 24/12 Hour LCD Desk Clock

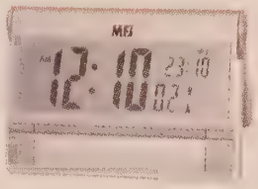


MFJ-124
$24.95
Ship Code A

Compact radio-controlled clock is unique. Its auto daylight savings time can be turned off, a must for using UTC time, which does not "change with the seasons." Dual alarms, snooze and bright backlight. Month/ date display, indoor temperature (14F-122F). U.S. time zone map display. Use 2 AAA batteries. ¾Wx3¾Hx2D in. LCD is ¾Wx1⅜H in.

MFJ Dual Time Display Atomic Clock

MFJ-133RC
$29.95
Ship Code A



MFJ-133RC dual time zone LCD clock can display two time zones. Lets you read any two time zones in 24 or 12 hour format. Atomic-controlled for absolute pin-point accuracy! Features huge 11/8 inch high-contrast LCD numerals easily read from 6 feet away. Super compact 4Wx3Hx3/4D inches. Super attractive silver clock folds up and slides in your shirt pocket for great travelability -- hamfest proven to wake you up on time.

Econo ATOMIC 24/12 LCD Desk Clock

MFJ-122
$14.95
Ship Code A

MFJ gives you an exceptional bargain that is loaded with fantastic features! 24/12 hour switchable, seconds display, date/day, snooze button or ingenius ID timer, bright green backlight for night viewing, US time zone map display, dual crescendo alarms. Operates on two AAA batteries -- long lasting (not included). Super tiny -- pocket camera size, 4½Wx2¾Hx 1½D inches. LCD is 2⅛Wx1 1/16H inches. Handsome Jet black, with silver buttons.

Large Display Wall Mount Atomic 24/12 Hour Clocks

Time/Calendar/Temp Atomic Clock

MFJ-130RC
$29.95
Ship Code A

This 24/12 hour wall or desk mount atomic clock has got all the information you need at a single glance!

Auto daylight savings time can be turned off, when setting clock for UTC.

Metallic blue/silver colored clock (8½x9 inches) has easy-to-read LCD display. Time digits are 21/4 inches tall. Running seconds display. Month, date, day and indoor temperature is displayed on bottom LCD display.

Easy-to-program. Choose C or F for temperatures. Use two AA batteries. Mounts on wall or includes desk mount. Measures 10¾Wx6Hx¾ inches.

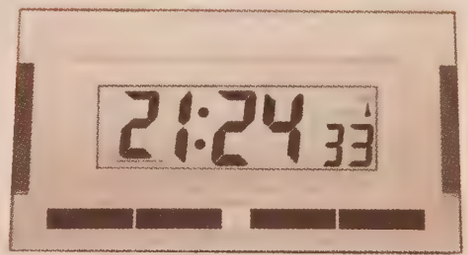
Dual Time Zone Atomic Clock

MFJ-121
$69.95
Ship Code A

Read both UTC and local time at-a-single-glance with this MFJ-121 dual atomic clock. Displays 24/12 hour time simultaneously. Mounted in a handsome black, hard-plastic frame, the MFJ-121 features HUGE, easy-to-see 2" tall by 1½" wide LCD numerals and also has running seconds display. 10½Wx8Hx¾D inches mounts on wall or desk mount.

Use two AAA batteries -- long lasting! This is the clock true ham radio operators have been waiting for a long time!

Solar Powered Eternity Atomic Clock



MFJ-123
$79.95
Ship Code A

MFJ's exclusive solar powered *Eternity Atomic Clock*™ works for an "eternity"! No need for batteries or to set time! Receives WWVB signal. Display is a whopping 2Hx6¾W inches. Choose 24 or 12 hour time. Huge running seconds display. Calendar format. 10¾Wx6Hx¾D" looks great on the wall or desk mount. Attractive tan metallic!

MFJ Radio-Controlled Wrist Watch

NEW! *BREAKTHROUGH LOW PRICE!!!*

MFJ-186RC
$29.95
Ship Code A

This MFJ-186RC has broken through the high price of Atomic Wrist Watches!!!

For an unbelievable **$29.95**, you get a beautiful full-featured radio-controlled watch that rivals the one your buddies paid $99.95 for!

This MFJ Radio-Controlled Wrist Watch automatically receives the WWVB Signal generated by the US Atomic Clock located in Fort Collins, Colorado.

MFJ-186RC lets you switch from 24 hour format or 12 hour format and to different time zones (Pacific, Mountain, Central, and Eastern). Also has running seconds display and day-of-week and date display.

This MFJ radio-controlled wrist watch has an alarm function and also can be used as a stopwatch for standard, accumulated, split-time, or competitor measurements.

A backlight will illuminate the LCD display for about three seconds in a brilliant blue.

Year, Month, and Day can be displayed in calendar mode. MFJ-186RC is water-resistant up to 3 ATM - no more fear of the rain as you work hamfest security.

Protected by MFJ's famous *"No Matter What™"* One year warranty. MFJ will repair or replace (our option) your watch for one full year.

MFJ Classic *HamGear™* Tools

MFJ-7224, $9.95. Flashlight toolbox. 24 piece nut/screwdriver set with flashlight case.

MFJ-7246, $5.00. 14-piece reverse ratchet set, great hard-plastic case.

MFJ-7220, $3.00. Cute 12 piece Driver bit set, plastic case.

MFJ-9-102, $3.95. Porcelain MFJ Coffee Mug.

Time/Temperature Wrist Watch

MFJ-185
$14.95
Ship Code A

Time/Temperature Wrist Watch. 24/12 hour switchable, gives world time of 50 different cities and gives typical high/low temperatures for each city in every month of the year. Automatic current temperature measurement (F or C), has country and/or area code of each city, has nice backlight for night viewing. Water-resistant to 3 ATM.

WIRELESS WEATHER STATION for an *Incredible* $59.95

New ***MFJ Wireless Weather Station is an incredible buy for only $59.95.***

MFJ-192
$59.95
Ship Code A

Here's what you get for $59.95:
Indoor Temperature Range: (+32F to +122F).
Humidity Range: (20% RH to 99%RH)
Humidity Resolution: (1%RH)
Quartz Clock: Accurate, 24/12 hour switch
Date/Day Display (Huge): .563" Time digits
Transmission Range: (100 Feet Max)
Transmission Frequency: (433.92 MHz)
Fabulous Backlight: Brilliant green backlight
Forecast Icons: Sunny, Slightly Sunny, Cloudy, Rainy, Stormy

For that price you will get a complete weather station that will display temperature, humidity, forecast icon, etc. With MFJ-192, you'll have a complete weather station that will quickly tell you if you need to grab a sweater, rain coat, or dress down for sunny weather. Indoor display unit (4Wx7Hx1D") will give a quick, accurate weather forecast in a single glance as you ragchew. 3.5" base/stand gives a nice viewing angle. Also can be wall-mounted.

No more worrying about how to dress as you head out in the morning. A quick glance at MFJ-192 will tell you to grab a sweater, winter coat, or make sure you pack the sunscreen. It lets you quickly understand that your golf game may be put off to another day. Uses 2 AA 1.5V batteries (not included) for receiver--long lasting! **Two Time Zones,** scroll-mode alternates.

Storm Alarm. This is an extremely impressive feature. Get a warning alarm when conditions may become threatening. Gives you a good chance to unplug your equipment in case of lightning. This is just the thing for hams that don't know when to quit and protect the shack!

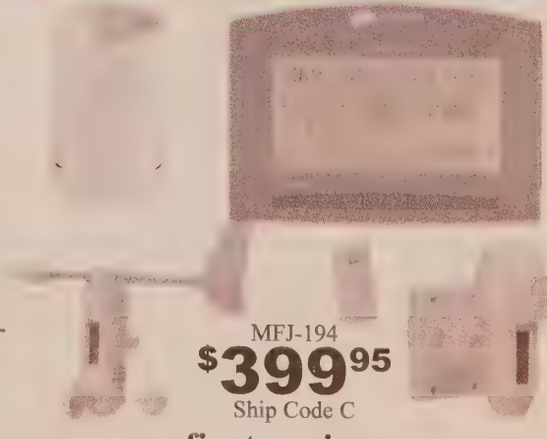
Max/Min Temperature Recording. Pressure Trend. MFJ-192 comes complete with one outdoor sensor. *Additional sensors can be purchased, MFJ-192S, $19.95 each.* A total of three sensors is selectable. This allows the monitoring of three different zone areas of interest within range.

Remote Sensor *(outdoor)* range (+14F to +122F). Uses 3 AAA batteries (not included) for remote--long lasting! Sensor measures $2\frac{1}{4}$Wx$3\frac{1}{2}$Hx1D inches. MFJ's 1 Year *No Matter What™* limited warranty.

MFJ Wireless Weather Station ----Wind, Temperature, Rainfall, and More

Displays.....Wind, Temperature, Humidity, Rainfall, Pressure.....*Has Forecasting Icons*....(sunny, cloudy with sunny intervals, cloudy, rainy). Compass display for wind speed, wind direction change, wind chill temperature, air pressure and air pressure tendency. *Includes...* Graphic display of air pressure changes within last 24 hours, rainfall recording (total 24 hours, last hour), dew point, all min/max recordings with date/time.

Also has....39 programmable visual and audible alarms (for example: frost, air pressure, temperature, unstable or stormy weather), solar powered outdoor wind, temperature, humidity and rain sensors with 433 MHz radio transmitter, battery powered indoor temperature, humidity, pressure sensors with 433 MHz transmitter, battery operated receiver -- Displays all current information *at-a-glance* on large high contract LCD.



MFJ-194
$399.95
Ship Code C

MORE.....receives signals from up to 9 temperature/humidity sending units (two included, others optional), all outdoor sensors are solar powered with self-charging battery backup, FCC approved wireless sensors transmit over 100 ft. at 433 MHz.

OPTIONS...

MFJ-194RS, $169.95. RS-232 Computer interface for MFJ-194 weather station.

MFJ 5-watt CW Transceivers

New improved ultra-hot receiver...enjoy DXing or ragchewing wherever you go...brush up on CW and upgrade...no-compromise performance...at a trrrific price!

MFJ-9040/9030/9020
MFJ-9017/9015
$189.95
Each. Choose band.
Ship Code A

Easy Operation: The most user-friendly radio you'll ever own. Sets up in seconds -- no microprocessor mumbo jumbo.

Great Sensitivity: New *hotter-than-ever* superhet receiver brings weakest signals in at full volume (super-quiet FET post amp stage in the IF filter makes this the best CW receiver going).

Excellent Selectivity: Tight CW bandwidth crystal ladder filter fights unwanted QRM and noise to the maximum.

Smooth and Stable VFO: Wide-spaced reduction drive VFO capacitor glides slowly across the easy-to-read dial.

True RIT: RIT control has center-detent -- makes listening or calling off-frequency a snap!

Easy on your Ears: Smooth AGC tracks only the signals you want to hear -- it never locks onto strong signals outside the audio bandpass. MFJ's *InstantRecovery AGC*™ snaps the receiver back at full gain after transmitting.

Built-in speaker: High efficiency 3" speaker driven by 100 mW of audio gives great volume.

Rugged Transmitter: Motorola power amplifier transistor delivers full QRP output, tolerates opens and accidental shorts without damage.

Sinewave Sidetone: Pure 700 Hz CW sidetone makes sending as much fun as receiving!

Semi-QSK: Set adjustable hold transmit/receive switching to suit your normal sending speed or set it for full QSK during contests.

Easy to Power: It uses little power -- only 50 mA average on receive and 1.2 amp peak on transmit. Perfect for battery operation in remote locations!

Rugged Construction: MFJ CW radios are built on G-10 double-sided plate-through PC boards in our plant. Rugged all-metal cabinet with brushed aluminum front panel and vinyl clad cover.

Integrated CW Station

Radio, tuner, power pack fasten together to form a tiny 6X6.5X8.5-in. integrated CW station.

$364.80 buys complete CW station. Includes CW transceiver, $189.95; MFJ-971 tuner, $99.95; MFJ-4114 power pack, $69.95; portable antenna, $39.95 . . . order: MFJ-9140B, 40M; MFJ-9130B, 30M; MFJ-9120B, 20M; MFJ-9117B, 17M; MFJ-9115B, 15M. $399.80 if purchased separately. **MFJ-27, $4.95,** carry handle. ***Save $30!***

Frequency Coverage: *Choose your favorite band!* 40 & 15 Meter models cover Nov- ice and TechPlus band segments -- makes a perfect *"first radio"* for new upgrading hams. **MFJ-9040** covers 7.000-7.150 MHz; **MFJ-9030** covers 10.100-10.150 MHz; **MFJ-9020** covers 14.000-14.075 MHz; **MFJ-9017** covers 18.068-18.110 MHz; **MFJ-9015** covers 21.000-21.200 MHz.

Hip-pocket size *QRP Cub* CW transceiver

MFJ-93XXK
$79.95
Kit, Ship Code A

MFJ *QRP-Cub*™ Trans-ceivers use surface mount technology to achieve big performance in a pocket-sized package.

The kit version has all SMT parts mounted and soldered. You just insert and solder the "through-hole" parts such as the connectors, inductors and trimmer caps.

Designed by QRP-ARCI hall-of-famer K1BQT for real world low-power operating conditions. Buy all or choose from 80, 40, 30, 20, 17, or 15 Meters. Specify band in "XX" area of model number.

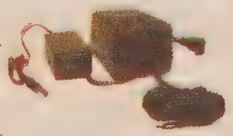
Hot receiver with 0.2 uV sensitivity, low noise, sharp passband crystal filter, Differential mode AGC, rock steady, over 80 dB signal range, robust AF output, 2 Watts thru 20 Meters, 1 Watt 15/17 Meters.

Power adjustable to zero, full QSK for smooth break-in, natural sidetone, shaped keying, custom TX offset, receiver passband center, low power drain. Tiny 3 3/4Wx1 1/2Hx4 1/2D inches. Wired unit covered by MFJ's *No Matter What*™ warranty.

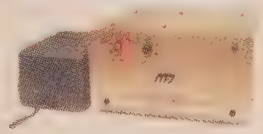
MFJ-93XXW, $129.95. Wired & tested cub. Specify band in "XX" portion of model #.

Portable and QRP Power Supplies and Accessories

MFJ-4110, $49.95.
Portable AC power supply. Connect to MFJ radios. LED indicates when power is applied. Output is approximately 13.8 VDC at 1.2 amps.



MFJ-4114, $69.95.
AC Power supply/Battery Pack uses Ni-Cd D cells or alkaline D cells (not included). Matches MFJ radios. Output is 13.8 VDC at 1.2 amps. Voltage regulated. Ni-Cd charge circuit.



MFJ-416, $49.95.
CW option kit for your MFJ-9406 six meter and your MFJ-9402 two meter adventure transceivers.

MFJ-726, $29.95. Narrow audio filter built for MFJ CW transceivers.

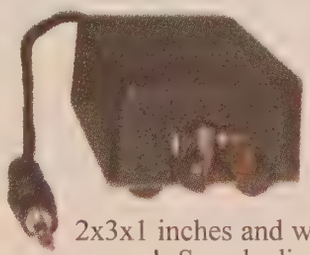
MFJ-412, $49.95. Curtis Chip Iambic Keyer Module for your MFJ 90 Series Transceivers. Use your MFJ paddles with the MFJ-412 and your transceiver for *complete CW fun!*

Great SSB/CW Accessories for your 90 Series MFJ Transceivers

MFJ-902, $79.95. Tiny Travel Tuner, 4 1/2x2 1/4x3 inches, fits in the palm of your hand! Handles a full 150 Watts, covers 80-10 Meters, has tuner bypass switch, tunes nearly anything! Perfect for backpacking, traveling, camping, etc. Great for rigs like IC-706MKIIG, Yaesu FT-100D, Kenwood TS-50. *See page 6!*

MFJ-971, $99.95. 200 Watt PEP Antenna Tuner also has 6 Watt range setting for QRP. Covers 1.8-30 MHz. 4:1 Toroid Balun is built in for balanced lines. Stackable with your MFJ-90 Series Transceivers. *See Page 5!*

MFJ-561, $19.95. Miniature lightweight iambic paddle is just 1 3/4Wx1 3/4 D 3/4H inches and weighs just 2 1/2 ounces -- tiny enough to fit in an Altoids® tin (cord and all!) -- great for traveling with QRP or "big" rigs!



MFJ-402, $59.95. Ham radio's tiniest electronic keyer with built-in iambic paddle! It's a *nano-size* 2x3x1 inches and weighs just 3 1/2 ounces! Speed adjusts 5-65 WPM, weight 25-75%, has Iambic mode A or B, normal or "bug" mode and reverse.

Folded Dipole Antennas for Your Portable Station

MFJ-1770A 10 Meters
MFJ-1770 15 Meters.
MFJ-1771 17 Meters.
MFJ-1772 20 Meters.
MFJ-1773 30 Meters
MFJ-1774 40 Meters

$39.95 each!

HF SSB Travel Radios™ are Feature-Packed

...the most powerful 12 watt radios you'll ever own ... hot receiver ... potent speech processing ... rugged transmitter ... proven on-air design ... real alalog S-meter ... powerful audio

Turn on your new MFJ SSB transceiver and you'll marvel at how well it performs.

Weak stations roll in with surprising clarity, faithfully reproduced by a single conversion receiver. On transmit, MFJ's exclusive *ConstantCurrent*™ speech processor cuts through noise and QRM like a far more complex radio.

Take this performance along on your next vacation or business trip -- the MFJ transceiver, microphone, power supply, and antenna can easily fit into your brief case or carry-on bag.

Simple operation: No microprocessor mumbo-jumbo -- on the air in minutes!

Great sensitivity: Features a quiet double balanced mixer front-end, single conversion clarity and plenty of gain. If a signal is there, you'll get it loud & clear!

Analog S-Meter: A real calibrated S-meter -- not a useless bargraph -- that makes adjusting an antenna tuner or finding the best beam heading clear-cut.

Excellent Selectivity: Eight poles of tight IF filtering cuts adjacent chatter and focuses transmitter power where you need it.

Smooth VFO: No annoying synthesizer jump or obscure keypad commands to deal with. Effortless tuning, custom reduction-drive ball-bearing capacitor.

Powerful audio: Big audio -- even in noisy locations from a special Signetics audio chip and rugged 3 inch speaker.

Low Current Requirements: You'll never have to lug around a heavy power supply to run this radio.

Rugged Transmitter: Bullet-proof output transistor runs cool, easily tolerates 3:1 VSWR and feedline shorts or opens.

Built to last: Conservative design, plate-through PC board, quality components, handsome brushed-aluminum panel and a tough vinyl clad case ensure years of dependable service.

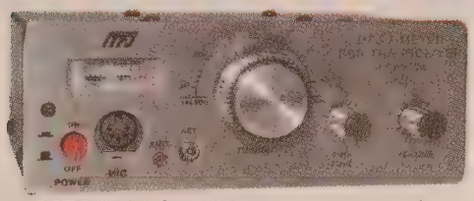
MFJ-9420 covers 14.150-14.350 MHz, **MFJ-9440** covers 7.150-7.300 MHz, **MFJ-9475** covers 3.750-4.000 MHz. One Watt audio output at 10% THD.

Draws 50-100 mA on receive and 1.2 amps peak on transmit at 13.8 VDC. 21/2x6½x6 inches.

MFJ-415B, $49.95. Install this CW module and operate CW, a must for DXers. Provides semi-QSK break-in and sidetone.

MFJ-9420, MFJ-9440/MFJ-9475
$239.95
$249.95 with mic
Ship Code A

MFJ SSB *Adventure* Radios



MFJ-9402
$289.95
($299.95 with MFJ-290 mic)
Ship Code A

MFJ-9406/9410
$259.95
($269.95 with MFJ-290 mic)
Ship Code A

MFJ-9406 for 6 Meters can economically open to you the exciting propagation at 50 MHz, not to mention local ragchews. And you can take this little set anywhere.

You get full coverage of 50.0 to 50.3 MHz with power output of 10 watts PEP.

MFJ-9402 for 2 Meters operates SSB and (optional) CW with 7 watts output, 144.0 to 144.3 MHz.

MFJ-9410 for 10 Meters packs 20 watts SSB PEP output and you'll be amazed at the clarity of its receiver. It covers 28.3 to 28.6 MHz.

Adventure radios are easy to operate: just turn on and go!

They all sport MFJ's exclusive *ConstantCurrent*™ syllabic speech processing for an added 4 to 6 dB of punch.

All three Adventure radios feature single-conversion superhet receivers wth a low-noise front end and double-balanced mixer to fight intermod and dig deep, and a 2.3 kHz crystal ladder filter.

All *Adventure* radios include a built-in low pass filter to help avoid TVI.

You also get real analog S-meters that double as speech processing level monitors, analog tuning with no unexpected rate shifts or stair-stepping, powerful one-half watt of audio from their 3½ inch top-mount speakers, and a solid-state FET switch to key an external amplifier.

They're energy efficient, operating from a 2 amp AC supply (3A for the model 9410) or from a 12 volt battery.

MFJ-416, $49.95. Optional CW module for all *Adventure* Radios.

MFJ *Adventure Radios* are built to last through their conservative design, premium quality, plate-through PC boards, quality components, handsome brushed aluminum faceplate and tough cabinets.

Fit an Adventure Radio just about anywhere: each is just 2.5X6.5X6 in.

Special offer -- add an **MFJ-290** microphone for just $10 more.

MFJ 6-Meter *FM Communicator*™

MFJ-9606
$159.95
MFJ-9606X
$169.95 w/Mic
Shipping Code A

The most inexpensive way to get on 6 Meter FM voice or packet! Potent 10 watt transmitter and *CrystalClearVoice*™ puts fun and fidelity back into ham radio with *true-to-life* speech quality and ultra-clean AFSK data signals.

Super fast PIN diode switching, no compromise dual-conversion FM receiver with quiet LNA, factory installed 52.525 MHz calling crystals.

Additional plug-in crystals, $24.95 per frequency.

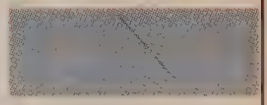
MFJ *2-Meter FM* Receiver Kit

Put together the **MFJ-8400K** and you'll have a go-anywhere 2-Meter FM receiver for for pennies. Features include a low noise, high gain RF preamp, smooth reduction drive tuning, and a 19-inch telescopic antenna. Has tune, squelch, and volume controls, and speaker. Quality components with glass epoxy PC board and all metal cabinet. Power requirement, 9 VDC. A tiny 4¼Wx2Hx4D in. **MFJ-8400W** available as a wired and tested unit.

MFJ-8400K
$79.95
Ship Code A

MFJ-8400W
$99.95
Ship Code A

MFJ Adventure Accessories



MFJ-1762, $79.95. 3-element 6 Meter yagi quadruples your effective radiated power over a half-wave dipole. 6 foot boom, 2 lbs. Can use TV rotator and mast. Handles 300 Watts PEP SSB. Mounts vertically or horizontally. Current balun decouples feedline. Great front-to-back ratio.

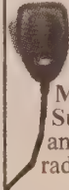
MFJ-1756, $79.95. Omni-directional low-angle vertical radiator lets you work plenty of DX in all directions even with low power. *GroundIsolated*™ radial system eliminates common mode current paths. Reduces undesirable feedline/supporting structure radiation. 55-inch. strong aluminum radiator.

MFJ-1736, $29.95. Hang this 6 Meter J-pole in the clear. Omni-directional full size 1/2 wave antenna with low angle radiation beats 1/4-waves.

MFJ-1776, $39.95. Low SWR 6-Meter folded dipole. **MFJ-1770A, $39.95.** (10 Meters).

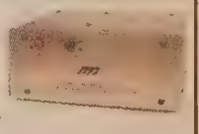
MFJ-906, $79.95. 6 Meter antenna tuner with lighted cross-needle meter (with **MFJ-1312D**, $14.95). 100 Watts FM, 200 Watts SSB PEP. **MFJ-903, $49.95,** Same as MFJ-906, less meter (See Page 6).

Mirage A-1015-G 150 watt ouutput 6-meter amplifier with built-in GaAs FET receiver preamp. $389. Page 59.



MFJ -290 dynamic handheld mic for all MFJ SSB radios, $29.95 when ordered separately.

MFJ-4110 Portable AC Power Supply, $49.95, fits in your pocket and is a perfect companion for radio-on-the go. 13.8 VDC output at 1.2 Amps.



MFJ-4114 Rechargable AC Power Supply, $69.95, with batt-try pack uses Ni-Cad D cells or alkaline D cells (not included). Switch-selectable AC or batteries. Output 13.8VDC, 1.2A. Page 31.

MFJ Sound Card-to-Rig Interface

Use sound card and rig for all digital modes!

Plug and Play -- includes software, all cables, AC power supply . . . RFI-proof . . . Isolation transformers -- no hum, noise, distortion . . . Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, Meteor Scatter, others . . . Use as Voice Keyer, CW Contest Memory Keyer . . . Monitor On/Off Switch . . .

Plug this new MFJ-1275/M/T sound card interface between your rig and computer and enjoy operating all digital modes.

Everything you need is included -- software, audio cables, RS-232 serial cable and AC power supply.

Provides fully automatic operation with audio and push-to-talk control. Matches sound card audio, eliminates ground loops and provides mic override.

Models available for all transceivers with 8-pin round, 8-pin modular (RJ-45) or 4-pin round microphone plugs.

Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, high speed CW Meteor Scatter and many others. Also use as Contest Voice Keyer and CW Contest Memory Keyer.

MFJ-1275/M/T **$99.95** Ship Code A

Digital Modes or Normal Operation

Select the ON digital mode -- all connections are made between your rig and computer for instant digital operation.

Select BYPASS normal mode -- your transceiver and computer connections are restored for their normal operation.

Audio Isolation Transformers

Audio isolation transformers and relay eliminate ground loops, audio hum, noise and distortion.

RFI-Proof

Extensive RF suppression and line isolation eliminates RF feedback problems.

Automatic Microphone Override

Transmit mic audio at any time by pressing PTT to override digital modes -- great for SSTV and Contest Voice Keyer.

More Impressive Features

Serial port -- lets computer control radio to override/interrupt digital transmissions.

VOX Control -- lets you use VOX control when not using computer serial port control.

Level Controls -- for transmitter drive and for receiver-to-sound card drive level. No need to adjust microphone gain or sound card level when you change modes.

Stereo or Mono Audio Input -- A front panel switch selects left, right, or both sound card audio output channels to accommodate various programs.

Off-the-air recording -- for replaying or for use with spectrum analyzer programs.

Monitor on/off switch lets you have a normal QSO and receive SSTV pictures at the same time in the *"monitor on"* position. This is great for modes like SSTV and Voice Keyer operation that may require listening to receive audio during operation.

Rugged Construction -- All aluminum cabinet and surface-mount construction gives you years of trouble-free service.

Use any Transceiver

Internal jumpers program microphone wiring for any brand or model radio -- no soldering required. Order **MFJ-1275** for 8-pin *round* mic plug. Order **MFJ-1275M** for 8-pin *modular* mic (RJ45) plug.

NEW! Order MFJ-1275T, for *4-pin round* mic plug, for Ten-Tec and others.

Plug and Play!

Everything you need is included --audio and RS-232 cables, AC power supply and a CD with a collection of the most popular amateur radio software to operate PSK-31, RTTY, SSTV, PACKET, AMTOR, CW, HSCW Meteor Scatter, Contest Voice Keying and other modes.Use 12 VDC or 110 VAC.

RS-232 to USB Adapter Cable

MFJ-5429, $24.95. Allows MFJ Soundcard Interface to be used with USB Port computer. DB9M RS-232 to USB 1.1 with driver. Supports Windws programs 98/98SE/ME/2000/XP.

No Matter What™ Warranty

We'll repair/replace for 1 year.

Super Sound Card Interface

MFJ-1279/M/T **$129.95** Ship Code A

This *super* sound card interface has all of the features of the MFJ-1275 ***plus . . .***

• **Auxiliary Input Jack:** Lets you switch your sound card from MFJ-1279 so you can use your sound card for something else. No more plugging/unplugging!

• **Direct CW/FSK Keying Jack:** Allows direct CW or FSK keying operation.

• **Headphone Jack:** Use your stereo headphones so you won't disturb your XYL (also turns off external speaker).

• **Footswitch:** Use footswitch or other for PTT (push-to-talk) when not using VOX.

Plug and Play! Includes software CD, RS-232 and audio cables, AC power supply.

Order MFJ-1279 for 8-pin round mic, MFJ-1279M for 8-pin modular (RJ-45) mic, MFJ-1279T for 4-pin round mic. ***Add "X" suffix for 220VAC.***

Basic Digital Interface

MFJ-1273B **$59.95** Ship Code A

Plug and Play! Has sound card, radio, speaker, RS-232 jacks. Includes: software CD and RS-232, audio, mic cables. No external power needed. Has no mic jack or mic switch. **Order** MFJ-1273B for 8 pin round mic, MFJ-1273BM for 8-pin modular (RJ-45) mic, MFJ-1273BT for 4-pin round mic.

DSP Sound Card Programs

MFJ-1296, $119.95. *RadioCom4* integrates PSK31, SSTV, FAX/Sat FAX, RTTY, SITOR, DSP audio filters and radio control.

MFJ-1298, $199.95. *RadioCom5* -- all features of *RadioCom4* plus DSP Audio Filter analyzer, Spectrum Analyzer, Dual Scope Display, Sound Recorder, Time and Frequency Management, Frequency Analyzer, 3D Scanner, Satellite tracking, Rig Control for over 80 radios, more! **Free demo at:** *www.mfjenterprises.com/freedemo.php*

MFJ TNC Accessories, Pre-wired Cables, Antenna Wires . . .

MFJ-1272B/M TNC/Microphone Switch

MFJ-1272B/M
$39.95
Ship code A

***Switch** between your TNC or Mic by pushing a button!*

Plug these pre-wired cables into your rig's microphone connector and into your TNC and you are ready to go -- no more hard-to-find connectors and wiring up cables -- no more plugging and unplugging to work voice/packet!

Works with HF, VHF and UHF radios with 8 pin mic connectors -- including Kenwood, ICOM, Yaesu, Alinco, Radio Shack, and others.

Plug-in jumpers let you quickly set-up for any radio. Factory set for Kenwood and Alinco. Audio-in and speaker jacks. 3¼x1¼x4 in.

TNC TYPE / Radio Mic Conn	All MFJ TNCs/PK900 PK12/PK96/PacComm Other TNC2 compatibles	KAM VHF KAM HF / KPC3 KP9612	AEA PK-232
8 pin round mic plug	MFJ-1272B	MFJ-1272BYV MFJ-1272BYH	MFJ-1272BX
8 pin modular mic plug	MFJ-1272M	MFJ-1272MYV MFJ-1272MYH	MFJ-1272MX

Pre-Wired Radio-to-TNC Cables

TNC to Radio Prewired Cables
$15.95
Ship code A

MFJ takes all the hassle and soldering out of wiring your rig to your TNC with these radio accessory port cables. Pre-wired cables save you time, money and aggravation. *Plug and play!*

TNC TYPE / Radios	All MFJ TNCs and Multimodes	KAM VHF[5]/ KAM HF[5]/ KPC3[5]/ KPC9612[5]	PK-232	PK900/PK96/ PK12/DSP232 /PacComm/ other TNC-2 compatibles
Alinco[3]/Strd HT	MFJ-5022	MFJ-5022YV	MFJ-5022X	MFJ-5022
Icom[1]/Yaesu/ *RadioShack HTs*	MFJ-5024	MFJ-5024YV	MFJ-5024X	MFJ-5024B
Kenwood[2] HTs	MFJ-5026	MFJ-5026YV	MFJ-5026X	MFJ-5026
Yaesu *R-Series* HT	MFJ-5020	MFJ-5020YV	MFJ-5020X	MFJ-5020R
Yaesu 8-pin	MFJ-5080	MFJ-5080YV MFJ-5080YH	MFJ-5080X	MFJ-5080
Icom[1] 8-pin	MFJ-5084	MFJ-5084YV MFJ-5084YH	MFJ-5084X	MFJ-5084
Kenwood/Alinco *8-pin*	MFJ-5086	MFJ-5086YV MFJ-5086YH	MFJ-5086X	MFJ-5086
Yaesu *8-pin modular*	MFJ-5080M	MFJ-5080MYV	MFJ-5080MX	MFJ-5080M
Icom[4] *8-pin modular*	MFJ-5084M	MFJ-5084MYV	MFJ-5084MX	MFJ-5084M
Kenwood *8-pin modular*	MFJ-5086M	MFJ-5086MYV	MFJ-5086MX	MFJ-5086M
Radio Shack *8-pin modular*	MFJ-5088M	MFJ-5088MYV	MFJ-5088MX	MFJ-5088M

1. does not include IC-W2A
2. does not include 2500
3. does not include 25A, 255A
4. does not include IC-100H, IC-2700H
5. YV for KAM VHF port, YH for KAM HF port. *Other Kantronics use YV*
6. YV for KP9612 1200 baud port
7. YH models for KPC9612 *9600 baud port*
8. Excludes DJ-100, 120T, 200, 500

Pre-wired Accessory Port-to-TNC cables . . . $19.95

TNC TYPE / Radios ACC Port	MFJ TNC/MMC PK900/PK12/DSP 232/PacComm TNC2 Compatibles	KAM VHF KAM HF KPC3	KPC-9612
ICOM HF 8 Pin DIN	MFJ-5063	MFJ-5063YH	----------
ICOM VHF 8 Pin DIN	MFJ-5064	MFJ-5064YV	MFJ-5064YV
ICOM 706 13-Pin DIN	MFJ-5065	MFJ-5065YH MFJ-5065YV	MFJ-5065YV
KENW/YAESU, AZDEN VHF 6-Pin mini DIN	MFJ-5060	MFJ-5060YV	MFJ-5060YV
KENW HF 13-Pin DIN	MFJ-5066	MFJ-5066YH	----------

Open End Cables with Radio Connnectors

MFJ-5082, $9.95. 8 pin round mic.
MFJ-5106, $4.95. 6 pin mini DIN.
MFJ-5205, $4.95. 5-pin DIN. MFJ TNC.
MFJ-5208, $9.95. 8 pin DIN. Acc. Port.
MFJ-5213, $9.95. 13-pin DIN, Acc port.
MFJ-5220, $9.95. Yaesu FT-50R cable.
MFJ-5222, $9.95. Split conn. Alinco, etc.
MFJ-5224, $9.95. IC/YA/AL/RS HTs.
MFJ-5226, $9.95. Kenwood Handhelds.
MFJ-5268, $9.95. 8 pin modular mic.

Pre-Wired Radio to Computer Interface

MFJ-5383 (I, K, Y, YB)
$49.95
Ship code A

Convenient pre-wired transceiver to computer interface cable has serial interface built-in! **MFJ-5383K,** Kenwood and compatibles. **MFJ-5383I,** Icom and compatibles. **MFJ-5383Y** for Yaesu standard 6-pin DIN, **MFJ-5383YB** for Yaesu 6 pin Mini DIN.

MFJ Cigarette Lighter Adapter

MFJ-5510
$6.95
Ship code A

Plug in your favorite accessories and operate off your auto's 12 VDC cigarette lighter socket. Or operate from your power supply in the shack! Provides power to your MFJ analyzer, keyer, meter or tuner lamp, counter, etc. Perfect for making quick adjustments to HF/VHF/UHF mobile antennas with the analyzer in hand! 18" retracted curly cord, 60" fully stretched.

MFJ *PacketOnly*™ data transceivers

Why tie up your expensive 2 Meter rig on a single packet channel? Enjoy dedicated high quality packet 1200 to 9600 baud on 2 Meters, 24 hours-a-day! MFJ's data radios are compatible with all TNCs with hardware DCDs and most TNCs with software DCDs. It couldn't be easier -- just plug in appropriate cable your antenna, 12 VDC and you're ready to go!

MFJ-8621, $149.95. Ready-to-operate on 145.01 MHz. Order other plug-in crystals for just $24.95 per frequency.

MFJ-8621X2, $159.95. Ready-to-use for APRS. Crystals pre-installed and transceiver precisely aligned. 144.390 MHz.

MFJ-8631, $169.95. *PacketOnly*™ 220 MHz. Has all the features of the 2 Meter version, ready-to-operate on 223.700 MHz.

MFJ-9606X, $169.95. Voice or packet with MFJ's new 6 Meter *FM Communicator*™ Transceiver. Crystalled for 52.525 MHz calling frequency. Easy crystal re-channel.

MFJ TNC Software and Accessories

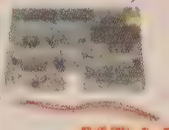
MFJ-1289W, $59.95. *MultiCom*™ *for Windows*. Control 2 TNCs at the same time in separate windows! Send, receive *true color* SSTV Scotty 1, Scotty 2, Martin 1, Martin 2, Robot 72 pictures. Great Multi-gray level FAX, maps, etc. **MFJ-1289M, $49.95,** dos only version.

MFJ-1284W, $49.95. MFJCom for Windows, MFJ-1270C TNCs and compatibles. **MFJ-1284M, $29.95,** dos only version for TNC2s.

MFJ-43, $9.95. Real-time clock. *New low price!*

MFJ-44, $14.96. Plug-in scope tuner.

MFJ-780, $99.95. Plug-in DSP board MFJ-1278/B.

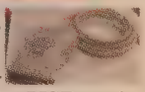


MFJ-2400, $19.95. *Great new low price!* 2400 baud packet modem. Faster communication lessens congestion on crowded bands. TNC still gets 300/ 1200 baud for compatibility with other TNCs.

MFJ RS232 to USB Adapter and others

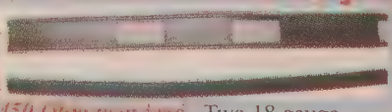
MFJ-5429, $24.95. DB9 Male RS-232 Serial Port to USB 1.1 port adapter cable. Includes a driver for Win98/ME/2000/XP on a 3.5 inch floppy disk. Use this to connect serial port devies to a computer with no serial ports.

MFJ-5427, $24.95. Use computer USB port to print on a parallel printer. 6 ft. cable, USB and DB-25 Female. Driver included.



MFJ-5428, $24.95. Same as MFJ-5427, but has USB and Centronics 36 Male.

Select MFJ wire for your antenna projects

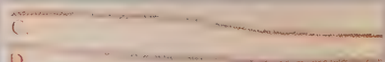


A.
B.

other low power uses.
MFJ-18T050, 50 Ft., $12.95.
MFJ-18T100, 75 Ft., $24.95.
MFJ-18T250, 250 Ft., $59.95.

A. *450 Ohm twin lead.* Two 18 gauge solid copper covered steel. Insulated and spaced by heavy duty black polyethylene. Uniform spacing between conductors insures proper balance, ideal for balanced line and dipole antenna projects.
MFJ-18H050, 50 Ft., $9.95.
MFJ-18H100, 100 Ft., $16.95.
MFJ-18H250, 250 Ft., $39.95.

B. *300 Ohm TV twin-lead.* Two 18 gauge stranded copper wire. Insulated and spaced by black polyethylene. Best for dipole, j-pole and for most



C.
D.

C. *Copper Antenna wire.* 14 gauge 7-strand copper wire. Flexible, great for dipole/antenna support.
MFJ-18G100, 100 Ft., $11.95.
MFJ-18G250, 250 Ft., $27.95.

D. *3/32 Dacron Wire Rope.* Fine copper wire is webbed into Dacron rope. Makes it extremely flexible yet it is super strong and light. Ideal for wire and dipole antenna projects.
MFJ-18D120, 120 Ft., $29.95.

MFJ Speaker Microphones for *New* Yaesu, Icom, Kenwood HTs

MFJ-295 (Y, I, K,) **$15.95** Ship Code A

MFJ-295R (VX-7R only) **$19.95** Ship Code A

Here's a top quality speaker mic that's perfect for those popular and tiny new Yaesu, Icom, Kenwood, Alinco, ADI and compatible handheld transceivers.

Fits perfectly in your hand and gives booming receive audio so to monitor stations while the microphone is attached to your lapel -- no more holding the speaker up to your ear!

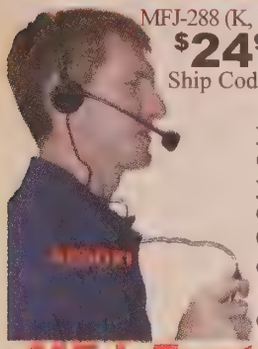
MFJ's high-quality non-directional electret condenser microphone gives your handheld crystal clear transmit audio.

The MFJ-295 Microphone has -53 dB sensitivity and 1K Ohm impedance. Excellent top quality speaker produces 83 dB of crystal clear receive audio. 8 Ohm impedance.

Built-in earphone jack, top quality PTT thumb switch, 8-position swivel lapel clip, 3½ feet of durable, stretchable cord. Made of high-impact plastic. Water resistant. Black mic and cord, protective bend points. **MFJ-295Y**, Yaesu, Icom, single pin plugs like Yaesu VX-5R and Icom Q7A. **MFJ-295I**, Fits Icom and compatibles. **MFJ-295K**, Fits Kenwood and others.

New! **MFJ-295R, $19.95** fits new Yaesu VX-7R handheld radio.

MFJ *Deluxe Headset Microphone™* adds professionalism



MFJ-288 (K, I, Y, R) **$24.95** Ship Code A

Walking through an airport, at home, or in your car, this MFJ deluxe headset gives you the ability to carry on a private QSO while doing other things.

The microphone can pick up your voice, whether booming or at a quiet whisper when placed appropriately near your mouth.

The earphone gives superb tonal quality so even distant stations will come in loud and clear.

Made of sturdy black plastic and strong metal sliders, one size fits all!

Superb speaker and mic foaming protects the mic and speaker elements as well as making the ear fit very comfortably. You could wear this headset all day long. It's perfect for mobile use with single ear design.

Small PTT switch can be conveniently attached to your shirt or pants pocket. **Has** six feet of cord from headset to plug.

MFJ-288I fits ICOM, Yaesu (not FT-50R), ADI, Alinco, Radio Shack and other compatibles. **MFJ-288K** fits Kenwood and compatible handheld radios. **MFJ-288Y** fits VX-5R, IC-Q7A and compatibles.

New! **MFJ-288R, $24.95**, fits new Yaesu VX-7R handheld transceiver.

MFJ *Featherweight* earbud *Boom Mic™*

MFJ-293 (K/Y/I/R) **$24.95** Ship Code A

Finally . . . a secure and comfortable earbud and boom microphone that's as small and inconspicuous as your radio! *No more gaudy, oversized headsets or massive handheld speaker microphones!*

This tiny earbud features a secure and comfortable rubber flex earloop design and 5 inch flexible boom microphone that adjusts perfectly to your mouth. The earloop secures your earbud for a comfortable fit so there's no more worrying about it falling out of your ear.

It's perfect for monitoring your receive audio when you are in a loud environment. MFJ-293's special rubber flex earloop design adjusts to fit the right or left ear (big or small) very securely and comfortably.

Made of a sturdy black polyurethane and comfortable rubber earloop, it'll give years of dependable use. Tiny thumb-sized PTT switch is built right into the 6 feet of cord.

MFJ-293 (I) fits Icom and compatibles. MFJ-293 (K) fits Kenwood. MFJ-293 (Y) fits Yaesu FT10R/40R/ 50R/VX-1R, Icom IC-Q7A, other radios using single plug-ins. **MFJ-293 (R)**, $24.95, fits Yaesu VX7R. All have MFJ one year limited warranty.

Vibration Earbud Mic

MFJ-283 (I,K,Y) **$39.95** Ship Code A

The speaker and microphone are both integrated into the earpiece -- picks up the vibration of your earbone and then translates the vibration into a signal through your transceiver! *Super Audio Quality!* It only transmits the vibrations from your ear, it's perfect for high-ambient environments like motorcycles, ATVs, etc. PTT has velcro for attaching to wool clothes or belt provided. Two clips on the cord position and secure the earpiece/PTT to your shirt coat comfortably and 42" durable cord lets you snake it around your body the way you want.

MFJ *MightyMic™* speaker microphone

MightyMic™ is a super speaker microphone for those tiny and popular miniaturized handheld radios on the market today like Yaesu's VX5R and Icom's Q7A.

Tiny PTT thumb switch with speaker/microphone and lapel clip all fits between two fingers. Tiny 19" retractable cord stretches to 4 feet.

This is the perfect speaker/microphone for concealment. You'll look like an FBI agent when you work with this streamlined product!

MFJ-294 (I, K, Y) **$16.95** Ship Code A

An 8-position swivel lapel clip lets you position and secure the microphone to your shirt or coat comfortably.

MFJ-294I for Icom and compatibles, and older Yaesu HTs.

MFJ-294Y for Yaesu FT10R/40R/50R /VX-1R/VX-5R, Icom IC-Q7A, other radios using single plug-ins. **MFJ-294K** for Kenwood and compatibles.

MFJ *Featherweight Earbud/Mic*

MFJ-292 (I,K,Y) **$17.95** Ship Code A

MFJ's *Featherweight Earbud/Mic* has a tiny earphone and thumb-size mic/PTT switch built right into the cord. Barely noticeable and so lightweight you won't know it's there. Get crystal clear receive/transmit audio out of an ultra light (30 grams) speaker. Non-directional electret condenser mic has -64 dB sensitivity, 1.1K Ohm impedance. 4 ft. cord. **MFJ-292I** fits ICOM, Yaesu and others; **MFJ-292K** for Kenwood; **MFJ-292Y** for Yaesu FT-10R/40R/50R/VX-1R/VX5R. *New!* **MFJ-292R, $19.95,** fits Yaesu VX-7R.

MFJ BoomMic/FM Scan

MFJ-284, $39.95, same as MFJ-293, but adds an FM broadcast scan radio inside the tiny PTT switch. Lets you catch up on the news or listen to music or sports while monitoring a 2-Meter operating frequency! Auto switches from FM to HT audio when monitoring frequency is detected. Batteries included. **Order MFJ-284I** for Icom, **MFJ-284K** for Kenwood, and **MFJ-284Y** for Yaesu VX5R family and Icom Q7A single plug HTs.

Identify your speaker/mic model

MFJ uses the letters I, K, Y and R to denote what connector is on the speaker mic. **I** is for Icom, some Yaesu, Radio Shack, ADI and most Alinco. K is for most Kenwood. Y is for Yaesu VX5R series and Icom Q7A. R is for the new Yaesu VX7R.

CLOSEOUT! SPEAKER MICS

MFJ-286 for Kenwood
MFJ-285 for Icom W-2A
MFJ-285WC for Alinco
Credit Card Radio only

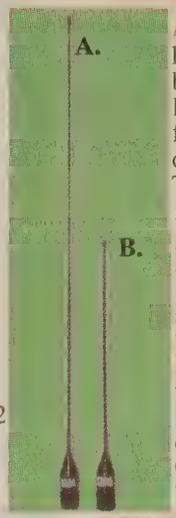
$9.00 *EACH!* Ship Code A

MFJ's handheld "Rubber Duck" antennas

High Gain *Dual Band* HT Flexible Duck Antennas

A. MFJ-1717, $21.95.
The World's best selling HT antenna! When other rubber ducks just give you noise, you'll enjoy dependable QSOs with the MFJ-1717. Only 15¾ inches in length, it's a halfwave on 440 MHz that gives you a hearty 2.15 dBi gain. On 2 Meters, you get an efficient full-size 1/4 wave antenna for full size performance.
MFJ-1717 is precisely tuned at the factory for low SWR. High-Q, low loss construction gives you maximum radiated power! BNC connector. It's rugged! It'll take all the bending, twisting, flexing and tugging you can dish out, and just pop right back up.
The radiator is protected by a durable synthetic rubber compound and has a hard protective safety tip.
A strong rigid base protects the matching network from flexing and changing frequency. SMA or BNC connector models.
B. MFJ-1716, $16.95. Dual band 144/440 MHz Flex duck is similar to MFJ-1717. 7½ in. length, 1/4 wave on 440 MHz and loaded 1/4 wave on 2 Mtrs. BNC. Order MFJ-1716S/1717S for SMA.
MFJ-1716V, $9.95. Same as MFJ-1716, but for 2-Meters only. BNC.
MFJ-1716VS, $9.95. Same as MFJ-1716V, but with SMA connector.

MFJ *SuperFlex* ThinDucks™



A. MFJ-1715, $24.95. Tie it in a knot . . . when you use it, it'll bounce back in shape -- you can't break it! It'll take all the bending, twisting, flexing and tugging you can dish out, and just pop right back up. This MFJ-1715 12½" *SuperFLEX*™ radiator is a ½ wave on 440 MHz -- gives a hearty 2.15 dBi gain. On 2 Meters, you get an efficient full size ¼ wave antenna. Safety tip, durable synthetic rubber compound. Add "S" for SMA connector.
B. MFJ-1713, $19.95. 5½" radiator is similar to MFJ-1715 except for gain on 440 MHz. Quarter wave on 440 MHz and an efficient loaded Quarter wave on 2 Meters. Add "S" for SMA connector.

MFJ *Telescopic* Handheld Antenna Range Extenders

A. MFJ-1714, $16.95. For really long range this endfed halfwave 2-Meter is hard to beat! Outperforms a 5/8 wave on an HT because the 5/8 wave needs a ground plane. Collapsed (10.5 inches) it performs like a rubber duck. 40 inches extended gives you *LongRanger*™ performance!

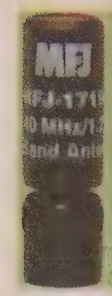
B. MFJ-1712, $14.95. This telescopic *Dual Bander* is for 144/440 MHz. It's a ¼ wave on 2 Meters, 5/8 wave with gain for 440 MHz. 7¼ inches collapsed acts like a rubber duck antenna. 19 inches extended gives you superior performance. Easy to fold up and put away!

C. MFJ-1710, $9.95. **The** *PocketLinear*™ is a pen sized 3/8 wave for 2 Meters! Carry this antenna in your shirt pocket like a ball point pen with pocket clip. When you rubber ducky on your HT just won't receive well, pull it out, extend to 24" and carry on your QSO. Tiny 5¼ inches collapsed.

MFJ *Triple Band* FlexiDuck™

MFJ-1720S, $29.95. MFJ's Triple Band HT *FlexiDuck*™ antenna is a whopping 19 inches tall -- it's big enough to deliver a powerful signal for 2 Meters, 440 MHz, and 6 Meters! It's a 5/8 Wave on 440 MHz to give you a hearty 3.2 dBi gain. On 2 Meters you get a 1/4 Wave antenna with 2.15 dBi gain. On 6 Meters you get an efficient full size 1/4 Wave antenna for full-size performance. Precision-tuned at the factory for low SWR. High-Q, low loss construction gives you maximum radiated power. 10 Watts. SMA Connector only.

SmallWonder™ HT Antenna



MFJ-1719/MFJ-1719S, $19.95. This HT Antenna is truly amazing for its size! Pound for pound, it's the best antenna around. Less than 1" tall, it's greatt for traveling and monitoring calls. It doesn't get in your way! Receives and transmits on 2 Meter/440 MHz. Also receives great signals at 1200 MHz. **MFJ-1719, BNC** connector or **MFJ-1719S, SMA** connector.

MFJ *TeleFlex*™ HT Antenna

MFJ-1816, $9.95. This special HT antenna is both flexible and telescopic at the same time! It extends to improve your range or collapses to act like a rubber duck; ***plus*** it takes all the bending, twisting and tugging you can dish out! Dual band, 144/440 MHz coverage with BNC connector only. 6" long collapsed, 8½" extended for long range. Great for on-the-go camping/hiking.

Foldover Telescopic HT antenna

MFJ-1812, $19.95. Dual band 144/440 MHz HT antenna combines telescopic and foldover features in a single antenna. Extends to improve range plus it folds over to get out of the way of your gut. MFJ-1812 is just 6" retracted and 16" extended. High Q low loss construction, super durability for years of use.

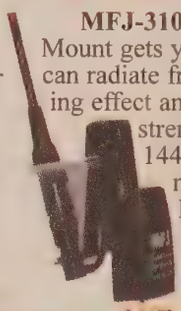
Back-of-Radio 144/440 Base

MFJ-1717PL, $24.95. Plug into a 2 Meter/440 MHz mobile/base rig -- not a 10-element yagi but it'll get you out in a hurry! Fold-over, flexi-duck, PL-259. 2 dBi gain on 440 MHz, full-size 1/4 wave 2 Meter. Hi-Q, low loss construction. 16½", hard safety tip. Watts PEP. **MFJ-1717P, $24.95.** Like MFJ-1717PL, but no fold-over. Has straight PL-259.

MFJ 2-Meter Pocket Roll-up

MFJ-1730, $19.95. Roll up this 1/2 wave 2-Meter antenna and stick it in your pocket. Vacations, camping, etc. Get home station performance *on-the-go*! Hang in a tree, plug the BNC into your HT and enjoy some great QSOs. It's omni-directional and has significant gain over a ¼ wave. Doesn't need a cumbersome ground plane so it's convenient for indoors.

HT Antenna Window Mount



MFJ-310, $14.95. This HT Window Mount gets your antenna outside where it can radiate freely -- takes away auto shielding effect and gives increased signal strength and reception. Use 144/440 MHz HT with BNC connector. 10 ft. mini RG-58 coax. Mount safely rolls up inside auto window. **MFJ-310S, $14.95.** Similar, but has SMA connectors on both ends.

MFJ *RapidBattery*™ Charger

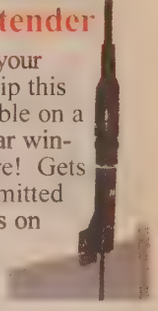
MFJ-641, $49.95. Quick/trickle for Ni-Cad/Ni-MH. Status LED, Quick/Trickle Auto-switch. 3½x5½x3". One charger slot included. **(I2)** for BP-131/132; **(I3)** BP-173/180; **(Y2)** FNB-10/11/12/17/27; (Y3) FNB-31/33; (Y4) FNB-40/41/V47/V49; (K) Kenwood PB and KNB. Add'l slots, $9.95 each.

MFJ *HT Antenna* Mag Mounts

Put your flexible HT rubber duck on the roof of your car! **MFJ-332S, $15.95.** HT Antenna Magnet Mount with SMA on each end. Has 12 feet of flexible RG-58AU coaxial line.

MFJ-332B, $15.95. HT Antenna Magnet Mount with BNC on each end. Has 12 feet of flexible RG-58AU coaxial line.

HT Antenna Extender



MFJ-312, $9.95. Get your antenna up *in-the-air!* Clip this HT antenna extension cable on a tree limb, outside your car window, just about anywhere! Gets better received and transmitted signals! BNC connectors on both ends. 3½ feet of tough mini coaxial line.

MFJ Accessories for FT-817 and Other QRP rigs

MFJ Walkabout Antenna 80 through 6 Meters

MFJ-1899T
$69.95
Ship Code A

***Work DX** walking about!*

This MFJ *Walkabout* antenna is designed for the FT-817 and other QRP rigs.

Covers all bands 80 Meters through 6 Meters including WARC Bands.

Its ten section telescoping whip is 52 inches fully extended and is 7 inches when collapsed.

The whip unscrews from the 12 inch base loading coil. It is ultra-compact for easy traveling. Handles 25 Watts.

You change bands by plugging the "wander lead" into the appropriate socket on the base coil. Fine tuning is done by adjusting the telescopic whip.

Has BNC connector. Use adapter for SO-239.

Single Band Walkabouts 6/10/12/15/17/20/30/40/80

10,12,15,17,20M — **$19.95** Ship Code A
30/40/80 M — **$24.95** Ship Code A
6 Meters — **$29.95** Ship Code A

Highly efficient single band *Walkabout* antennas for the FT-817 and other QRP rigs let you work exciting DX *no matter where you are -- hotel, mountain top, etc.!*

Each 10 section telescoping whip is 51 inches fully extended and collapses to 5 1/2 inches and screws into a base loading coil. Handles 25 Watts. Has BNC connector. Use adapter for SO-239. MFJ-7703, $6.95, below.

MFJ-1806T (6M) $29.95
MFJ-1810T (10M) $19.95
MFJ-1812T (12M) $19.95
MFJ-1815T (15M) $19.95
MFJ-1817T (17M) $19.95
MFJ-1820T (20M) $19.95
MFJ-1830T (30M) $24.95
MFJ-1840T (40M) $24.95
MFJ-1880T (80M) $24.95

Tiny 10 oz. Switching Power Supply for Yaesu FT-817 and QRP Rigs.

MFJ-4103
$39.95
Ship Code A

MFJ-4103 *Miniature Switching Power Supply* can deliver up to 40 Watts (13.8 VDC at 2.89 Amps) of reliable power anywhere in the world.

Incredibly tiny -- 4 1/8 X 2 5/8 X 1 3/8" and weighs just 10oz., including power cord, connector. Output DC cable with a standard coaxial DC power connector (2.1mm ID, 5.5mm OD).

Sturdy adapter cable included for Yaesu radios. The MFJ-4103 has excellent specs and out performs all other switching power supplies made for the FT-817. Perfect for QRP rigs needing up to 2.89 Amps.

Works for input voltages 100-240 VAC and power line frequencies 47-63 HZ. Use the MFJ-4103 almost anywhere in the world by plugging in an AC power cord with an appropriate wall plug for that country (Not incl. Laptop computer AC cord recommended).

Overvoltage, overcurrent and overtemp protected. Excellent 1% line and 5% load regulation and 1% peak to peak ripple/noise. Op temperature is 0-40° C. Mean time between failure is 100,000 hours at full load at 25° C ambient. Meets FCC part 15 class B, UL 1950 and CSA 22.2.

2-Meter / 440 MHz "Back-of-Radio" Antenna

MFJ-1717PL, $24.95. Foldover dual band flex-duck 16 1/2 inch antenna with quality PL-259 connector. Hearty 2.15 dBi gain on 440 MHz and full size 1/4 Wave on 2 Meters.

PL-259-to-BNC *right angle*

MFJ-7703, $6.95. Sturdy, adapter for your FT-817 and multimode HF antennas like MFJ-1899T. Reinforced elbow for less stress on radio connector.

MFJ Miniature Travel Iambic Paddle

MFJ-561, $19.95. 1 3/4 Wx1 3/4 Dx3/4 H inches. Full size feel for smooth, easy CW. Precision formed from resilient phosphorous bronze. Stainless steel base with rubber feet. 3 foot cord, 3.5 mm plug.

MFJ Pocket Repeater

Extend range of any radio 2 Meter, 440 MHz, Handhelds, Mobile, Base!!

MFJ-662
$79.95
Ship Code A

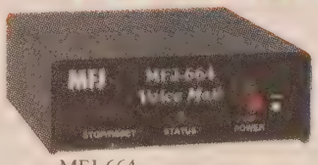
When you and your buddy are out of radio range, the MFJ Simplex Pocket Repeater™ greatly extends your range. You can have your own private, portable repeater within your neighborhood or when hunting, fishing, camping, hiking, caravaning on-the-roadside.

During a disaster, your MFJ-662 can provide emergency communications when repeaters are down. You can communicate way beyond the normal range of your handheld or mobile.

Works with virtually any radios in any mode or frequency in any ham band or business band. *It's Legal!* As a simplex repeater, MFJ-662 with another radio digitally records audio from an out-of-range HT/Mobile, then retransmits to other HT/Mobiles.Tiny, pocket -size 2 1/4 Wx3 3/4 Hx1D".

Repeats up to 32 second messages. LED lights when recording. On/Off switch. 5 pin header for radio cable (connector included). Use 9 volt battery, 9-15 VDC or 110 VAC with optional MFJ-1312D, *$14.95.* Pre-wired cables for most radios, *$15.95. See cable column on page 34.*

MFJ Radio Voice Mail



MFJ-664
$129.95
Ship Code A

Two way radio voice mail lets you and your friends or family leave and retrieve voice messages for each other.

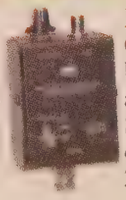
When in radio range, stay in touch 24-hours-a-day no matter where you are. Program custom access codes and security codes so you can decide who uses your *Radio voice mail.* It's your own private, portable repeater. MFJ-664 can provide emergency communications when repeaters are down.

Test your own signal quality by repeating your transmission thru another radio. Automatically repeat recorded message continuously. Great for determining band openings, foxhunting and public service announcements.

Non-volatile memory -- up to 2 full minutes of voice messages. Keypad can be used for remote operation with Morse code verification of functions. End-of-message beep and output level control for clean audio. Use 9V battery or 9-15 VDC or 110 VAC with MFJ-1312D, *$14.95.* 4Wx3 1/2 Dx1 1/2H inches. Use any radio. With PTT or mic closure sensing. Pre-wired cables for Yaesu. (See page 34).

HT VHF SWR/Power Meters and *Intermod Fighters™*

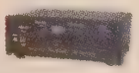
MFJ-840, $19.95, accurately checks power output of your 2 Meter handheld into a 50 Ohm dummy load. 5 W full scale. BNC. 2x2 1/4 x1 1/2".



MFJ-841, $39.95, Connects directly between HT and antenna. Reads SWR and power output to 5 Watts. 2x2 1/4 x1 1/2 inches.

MFJ-713, $59.95. HT radio *Intermod Fighter™.* BNC for hook-up to your HT. Rubber duck antenna sits on top of the MFJ-713. Use 9V battery. 2x2 1/2 x1 1/2". **MFJ-714, $59.95.** SO-239. Use external 12 VDC for power.

2-Meter CW Interface



MFJ-552, $79.95. MFJ's *JimHandy™* CW interface plugs into your 144/440 MHz handheld and converts it into a modulated CW transceiver -- just plug in your key.

MFJ-550, $7.95 Straight key.

MFJ VHF/UHF MAGNET MOUNT MOBILE ANTENNAS

Magnet Mount Dual Band 144/440 MHz Mobile

MFJ-1724B
$16.95
Ship Code A

This MFJ-1724B is the world's best selling dual band 2 Meter/440 MHz magnet mount mobile antenna! It's perfect for your dual band mobile or HT. Free BNC handheld adapter. MFJ's powerful 31/2 inch magnet base holds your antenna firmly even at highway speeds. The base has a scratch resistant rubber guard to protect your car. The MFJ-1724B black stainless steel whip looks like an attractive cellular antenna. Only 19 inches tall, you can park in your garage without knocking is over. Low SWR across both bands keeps your transceiver safe from overheating. Get excellent gain on 440 MHz band and 2 Meters. Handles 300 Watts PEP. 15 feet coax, PL-259.

Power*Gain™ Dual Band 144/440 MHz Mobile

MFJ-1729
$34.95
Ship Code A

MFJ's *Power*Gain*™ is ham radio's most powerful dual band magnet mount mobile antenna! Outstanding gain on 440 MHz and 2 Meters. Low SWR lets your rig deliver full power safely. Get a whopping 2.6 dB gain on 2 Meters and 6.3 dB gain on 440 MHz. Perfect for dual band mobiles or HTs. Free BNC adapter. Handles 300 Watts PEP. MFJ's exclusive 27½ inch stainless steel *SlimLine Radiator*™ minimizes wind vibration for less SWR flutter giving you longer range and better readability. Inculdes 15 feet of coax with PL 259 Connector, heavy duty magnet mount. *New!* **MFJ-1723, $34.95.** Similar to MFJ-1729, covers 220 MHz, 2.6dB gain. 22.5 inch radiator.

MFJ 5/8 Wave 2/6 Meter Magnet Mount Mobile

MFJ-1728B
$29.95
Ship Code A

MFJ's 5/8 wave on 2 Meters give you the maximum possible theoretical gain of any single element mobile antenna, no matter how much others cost. On 6 Meters, the MFJ-1728B is a high performance full quarter wave antenna. It's an excellent companion for your MFJ-9406, MFJ-9606 or other 6 Meter mobile or handheld transceiver. Give you great "magic band" signals usedmobile or as a base station antenna. It's perfect for your mobile or HT. Free BNC handheld adapter. It's rated at 300 Watts PEP. It's amplifier ready. Low SWR lets your transceiver deliver full power safely. A heavey duty magnet mount holds your antenna tight at highway speeds. You get 12 ft. of coax and a stainless steel radiator that'll endure years of harsh mobile use. Easy to take down with an allen wrench.

MFJ Glass Mount Dual Band 144/440 Mobiles

A MFJ-1734
Dual Bander
$39.95
Ship Code A

B MFJ-1738
2-Meters
$29.95
Ship Code A

Glass mount dual band 144/440 MHz mobile. A 6 inch counterpoise mounted inside lowers SWR and makes tuning easy. Free BNC handheld adapter. Excellent gain on 440 MHz and 2 Meters. Low SWR lets your transceiver deliver full power safely. MFJ's Exclusive 26 inch stainless steel radiator minimizes wind vibration for less SWR flutter. Longer range and better readability. Handles 50 Watts. 12 Ft. tough coaxial line, cleaning pad and mounting hardware.

MFJ-1738, $29.95. Similar to MFJ-1734 but 2 Meter mobile glass mount antenna.

MFJ-94, $4.95. Remount Kit for Glass Mounts. Avoid factory tint placement.

MFJ UltraLite™ Mag Mounts

MFJ-1721
Two Meters
$14.95
Ship Code A

MFJ-1722
Dual Bander
$18.95
Ship Code A

MFJ-1721, (left) is an *UltraLite*™ Mobile magnet mount antenna. Has 12 feet of RG-174U coaxial line. 1/4 wave on 2 Meters. Weighs less than 2 ounces. 1/8" rare earth magnet is tiny, but powerful! Thin 20 inch whip.

MFJ-1722, (right) is similar to MFJ-1721, but dual Band *UltraLite*™. 5/8 Wave on 440 MHz. 1/4 Wave on 2 Meters.

MFJ Mobile Antenna Ground Plane Kit

MFJ-1401
$19.95
Ship Code B

MFJ-1401 converts most mobile antennas into a ground plane base station antenna. 200 Watts. Accepts VHF/UHF mobile antennas with PL-259 connector. Includes stainless steel mounting hardware, two hose clamps, allen wrench, and four 20.5 inch radials. Easy install on any 2" pipe with clamps or mounting holes.

MFJ-922 VHF/UHF Antenna Tuner, handles 150 Watts

MFJ-922
$79.95
Ship Code A

This compact dual band VHF/UHF antenna tuner has a single meter that reads SWR and power. No zero adjustment needed. It covers VHF from 136 to 175 MHz and UHF from 420 to 460 MHz. You can read power up to 150 Watts in 2 ranges: 60 Watts or 150 Watts. It's a great antenna tuner for HTs, mobile rigs or amplifiers up to 150 Watts. Its super-compact size lets you take it anywhere -- measures a tiny 4x2½x1¼ inches -- you can put it in your shirt pocket! Carry it with you in your car, camping trips, etc. Tuning tool included.

MFJ-844 VHF/UHF SWR Mobile Power Meter

MFJ-844
$69.95
Ship Code A

MFJ-844 covers 144 and 440 MHz. Insertion loss is 0.3 dB or lower with 50 Ohm impedance. SO-239 connectors. Tiny size lets you put it just about anywhere in your operating position. 3.75Wx3H x1.25D inches.

Handles 200 Watts and measures SWR and Power in three power ranges: 15W, 60W, and 200W. A multi-colored white, orange, and black meter makes for easy reading. **Extra large**, highly visible meter. Die-cast metal, quality connectors for years of use.

MFJ-916B VHF/UHF Duplexer, handles 200 Watts

MFJ-916B
$29.95
Ship Code A

This MFJ duplexer lets you use a 2 Meter/440 MHz antenna with separate 2 Meter and 440 MHz transceivers without a built-in duplexer.

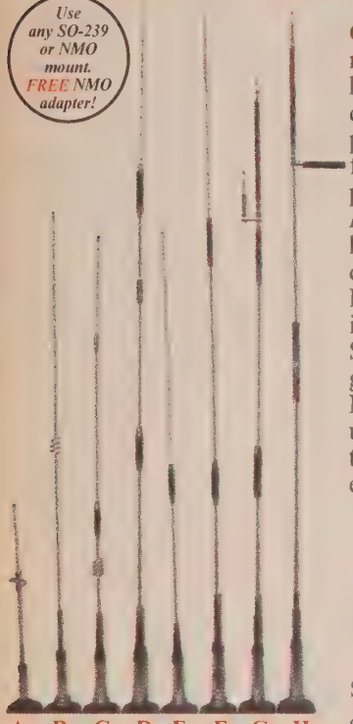
You can also use two dual band antennas with a dual band transceiver with only one RF output.

Heavy duty diecast enclosure houses low pass networks that separate/combine 144/440 MHz signals.

Low loss SO-239 connectors. Ports are 50 Ohms, unit handles 200 Watts PEP.

MFJ-916BN, $34.95. Same as MFJ-916B, but has low loss type "N" connectors instead of SO-239.

MFJ *RuffRider*™ High Gain Mobile Antennas



A. B. C. D. E. F. G. H.
Shown on magnet mounts, not included.

MFJ's *RuffRider*™ High Gain multi-banded mobile antenna series is for serious mobile hams demanding the highest quality products at reasonable prices. *RuffRiders*™ feature finest quality construction using precision machined components. *RuffRiders*™ battle the elements, handle rugged rides and day-to-day highway abuse. They have a PL-259 base mount for quick installation to your heavy duty SO-239 magnet, trunk/hatch, gutter or mirror mount. A *free* NMO adapter is in-cluded for use with an NMO mount. MFJ tri-magnet mount is recommended for big antennas.

Choose from several different length and gain antennas . . .

A. *RuffRider Junior*™. Premium, short 16½" antenna fits in any garage on any auto. ¼ Wave on 2 Meters, ½ Wave, 3 dB gain on 440 MHz.100 Watts. No fold-over.
MFJ-1402 **$34.95** Ship Code A

B. *RuffRider High Power*™. Just 40" long handles full *200 Watts*. Great for high power mobile amp. ½ Wave, 3 dB gain on 2 Meters, ⅝ Wave, 5.5 dB gain on 440 MHz.
MFJ-1412 **$49.95** Ship Code C

C. *RuffRider High Gain*™. 41½" long antenna gives extra gain with little height increase. Handles 150 W. ½ Wave, 3.2 dB gain on 2 Meters, ⅝ Wave, 5.7 dB on 440 MHz.
MFJ-1422 **$49.95** Ship Code C

D. *RuffRider Hyper Gain*™. 62½" brute gives a whopping 5 dB gain on ⅞ Wave 2 Meters, ⅝ Wave, 7.6 dB gain on 440 MHz. Our highest gain antenna. Handles 150 Watts.
MFJ-1432 **$69.95** Ship Code D

E. *RuffRider Triple Threat*™. 59 inches of stacked elements with high-Q phasing coils give a whopping 7.2 dB gain on 440 MHz, 4.5 dB on 2 Meters and 2.15 dB on 6 Meters. Handles 150 Watts.
MFJ-1436 **$79.95** Ship Code D

F. *NEW! Covers 220 MHz! RuffRider Triple ThreatII*™. Slim 38 inches, similar to MFJ-1436, but 2.15 dB on 2-Meters, 3.5 dB on 220 MHz, and 6 dB gain on 440 MHz. 100 Watts.
MFJ-1434 **$79.95** Ship Code D

G. *NEW! VHF/UHF & 10 Meters! RuffRider QuadBander*™. 52", 7.2 dB - 440 MHz, 4.5 dB - 144 and 2.15 dB on 6. *Go HF with 10 Meters!* 150 Watts.
MFJ-1438 **$99.95** Ship Code D

H. *New! Covers 40 through 6, Plus 144/440 MHz!* Covers 40/20/15/10/6/2 Meters & 440 MHz! Use up to 4 coils at one time. See page 41 for more details. Tri-magnet mount recommended.
MFJ-1456 **$149.95** Ship Code D

Mobile Antenna Ground plane Kit

MFJ-1401, $19.95. Converts *RuffRider*™s and most other mobile antennas with PL-259 connector into a ground plane base station antenna. More details, page 38.

MFJ super heavy duty *RuffRider*™ mobile antenna mounts

MFJ Trunk/Hatchback Lip Mount

MFJ's *RuffRider*™ Mounts feature *extra-wide* four inch lip and large reinforcing tabs on each side safely distributes load over your vehicle's lip. 2 large set screws on each end locks your mount in place. A scratch proof rubber guard protects your vehicle's finish. Secures large VHF/UHF and medium size HF antennas. Adjustable angles. 10 ft. low loss coax has PL-259 connector. Has Allen wrenches and weather protection caps.

MFJ-345S SO-239 **$34.95** Ship Code A
MFJ-345T 3/8x24 **$39.95**

Deluxe Trunk/Hatchback Lip Mount

This heavy-duty trunk/hatchback fold-over lip mount has a wide 3.3 inch lip and reinforcing tabs on each side to safely distribute the antenna load. Convenient thumb/finger *lay-over* knob lets you lay down your antenna to clear garages and low over-hangs -- several position detents in either direction. Scratch-proof foam guard protects your vehicles finish. 17 feet of coaxial line is terminated with PL-259 connector.

MFJ-348S SO-239 **$36.95** Ship Code A
MFJ-348T 3/8x24 **$42.95**

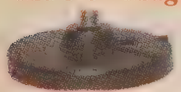
Mirror/Luggage Pipe Mounts

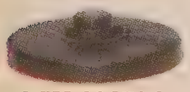
MFJ-342 **$9.95** Ship Code A

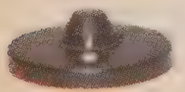
3/8 inch threaded HF antenna pipe /mirror mount fits MFJ's HF mobile *HamTennas*™ or any 3/8" style whips. Stainless steel clamps can mount to ¼ or ½" pipe. SO-239 connector w/lock washer feeds coaxial line underneath 3/8 inch connector.

MFJ-344 is similar to MFJ-342, but is vertical mount for ⅜ inch antennas.
MFJ-344 **$9.95** Ship Code A

MFJ 5" Magnet Mount with coax


MFJ-335BS

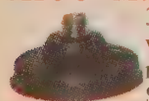

MFJ-335BM


MFJ-335BT

MFJ-335BS SO-239
MFJ-335BM NMO
MFJ-335BT 3/8 inch
$19.95 Ship Code A

5-inch *super strong* black magnet mount with 17 feet of coaxial line terminated with PL-259 connector. SO-239 (BS) or NMO (BM) or 3/8 inch (BT). All are jet-black in color.

MFJ 3" Magnet Mount with coax



3-inch black magnet mount with 17 feetcoaxial line terminated with PL-259 connector. SO-239(BS) or NMO (BM).

MFJ-333BS SO-239
MFJ-333BM NMO
$14.95 Ship Code A

NMO-to-3/8x24 Adapter

Quality adapter lets you use an HF whip with an NMO style mount.

MFJ-7707 **$7.95** Ship Code A

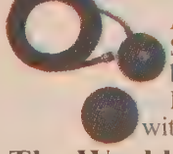
Triple Magnet Mount

3 super-strong 5-Inch Magnets

MFJ *Goliath*™ Tri-Magnet Mount has three super strong 5-inch magnets bolted to 1/4 inch triangular mount. 17 feet coax. **Caution:** once on, it's difficult to get it back off!

MFJ-336S SO-239 **MFJ-336M** NMO **MFJ-336T** 3/8x24
$29.95 Each Ship Code C

MFJ *HT Antenna* Mag Mounts



MFJ-332S, $14.95. HT Antenna Magnet Mount with SMA on each end. 12 ft. flexible RG-58AU coaxial line.
MFJ-332B, $15.95. HT Mount with BNC on each end.

MFJ Mirror/Luggage Pipe Mount

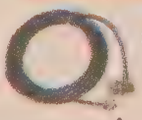
MFJ *RuffRider*™ Mounts on support rod of mirror, luggage rack or spare tire carrier of your vehicle (up to 5/8 in. diameter). Secures large VHF/UHF and medium size HF antennas. 2 axis of rotation position your antenna to any desired angle. Serrated swivel joint locks secure with huge 3/8" set screw. Convenient thumb/finger turn knob. 10 foot coax with PL-259.

MFJ-340 SO-239 **$34.95** Ship Code A

MFJ GumDrop™ 3/8x24 Mount

GumDrop™ 3/8" antenna hard mount. Tough, durable plastic, rubber seal protects vehicle finish.
MFJ-343 3/8x24 **$9.95** Ship Code A

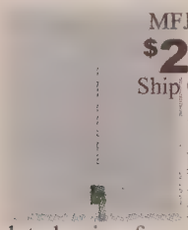
MFJ Hard Mount Coaxial Line



MFJ-341S/M SO-239 or NMO **$19.95** Ship Code A
Hard mount coaxial line. SO-239(S) or NMO (M).

MFJ 5/8 Wave Ground Plane

For an incredible $24.95, you get a 300 Watt 5/8 Wave ground plane 2 Meter home station antenna. Other 5/8 wave ground planes can't work any better -- no matter how much they cost . . .



MFJ-1750
$24.95
Ship Code A

Look at all you get at an incredible $24.95!

You get a 300 Watt 5/8 wave ground plane base antenna for 2 Meters that gives you the maximum possible calculated gain of any single element antenna.

Other 5/8 waves *can't* work any better -- no matter how much they cost.

You get *shunt fed matching network* for lowest possible SWR over entire 2 Meter band. Plus, it bleeds off unwanted static.

You get MFJ's *RapidTuneRadiator*™ for quick accurate tuning.

You get a ceramic insulator for low RF loss. Result? Maximum radiated power is achieved.

Easy installation to any 1 to 1½ inch mast, (not included) with a single U-bolt (included).

You get strong lightweight aluminum construction that's protected by MFJ's *PermanentMolecularBonding Technology*™. This super durable finish actually bonds itself to aluminum molecules -- it won't come off unless metal comes off!

You get MFJ's famous *No Matter What*™ one year limited warranty.

Just $24.95 gets you the most incredible value in a 5/8 wave base station ground plane. Remember, other 5/8 wave ground planes can't work any better.

MFJ-1750, $24.95. 2 Meter 5/8 Wave.
MFJ-1752, $24.95. 220 MHz 5/8 Wave.

Dual Band 144/440 Ground Plane

MFJ-1754
$29.95
Ship Code A

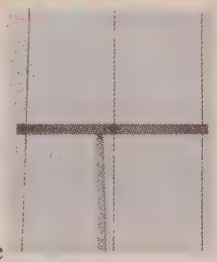
MFJ's dual band 144/440 ground plane antenna is small, lightweight and super easy to mount to any 1 to 1½ inch mast, (not included) with a single included U-bolt -- you'll have it up and operating anywhere in just minutes. Great for backpacking.

Mount it inside to get on-the-air quickly. You get extra long range on 440 MHz with a high gain halfwave over quarter wave antenna and solid 1/4 wave performance on 2 Meters.

Ground plane is sloped to give low SWR across both bands and to minimize feedline radiation. This gives you more useful radiated power, reduced TVI and noise pickup by the coax shield.

Portable 3-element 2-Meter beam

MFJ-1763
$44.95
Ship Code A



Check out MFJ's portable 3 element beam for 2 Meters. Unique design lets you set it up or take it down in seconds! Elements simply screw into the boom. It's easy to store and sturdy enough to use as your base station antenna.

The extra gain and directivity from this beam could get you through when a vertical can't. It'll make the difference between "you're breaking up . . ." and "Solid copy".

Center mount it and use it vertically on FM or horizontally for SSB. By rotating it you can minimize QRM. Unique design also lets you end mount it vertically or horizontally on the leg of a tower . . . great for Packet and *PacketCluster*™.

Its compact 2¾ foot boom gives you a calculated gain within 1 dB of a four element Yagi with a boom nearly twice as long.

Extra thick elements maintain high gain and directivity over virtually the whole 2 Meter band. A ferrite choke balun gives you excellent feedline decoupling. Coax coupling is further reduced by mounting the SO-239 connector behind the reflector.

Has MFJ's Permanent Molecular Bonding Technology™. New coating won't come off unless the metal comes off.

Weighs just 2 pounds. Boom is 30½x1¾x1¼ inches. Mounts easily to mast or tower leg with single included U-bolt. Mast not included. Super easy to put together in a hurry!

Take the MFJ-1763 Two Meter portable Yagi with you wherever you go and have the oomph and directivity of a beam.

Improved 1/4 Wave Ground Plane

MFJ-1740
$19.95
Ship Code A

For $19.95, you get an *improved* 300 Watt 1/4 Wave Ground Plane for 2 Meters that'll bring up repeaters as well as or better than any 1/4 wave ground plane -- even if it costs twice as much.

The *improved* MFJ 1/4 wave ground plane minimizes feedline radiation for more useful radiated power, reduced TVI and noise pickup by the coax shield.

You get MFJ's *Fast-Tune-Radiator*™ that makes tuning to your favorite part of the band a snap. U-bolt and mounting hardware included. Easy to install on 1½" mast. Can be cut for 220 or 440 MHz. A cutting chart is included.

MFJ 7 element 144/440 MHz Yagi

MFJ-1768
$79.95
Ship Code A

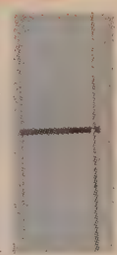
Get 7 elements on 440 MHz and 4 elements on 2 Meters.

Exclusive dual band balanced feed with *FerriteChoke*™ decoupling prevents pattern skewing-- gives low SWR. 1/4 inch diameter driver elements give wide bandwidth. *National Bureau of Standards* design is optimized for maximum gain, high front-to-back, clean symmetrical pattern. Mounts vertically for FM/Packet or horizontally for SSB with single included U-bolt on 1 to 1½ inch mast or tower leg.

Includes a 5 foot, 1⅛ inch diameter boom, antenna weighs in at 2 pounds. Elements are electrically isolated from boom.

Stacked 2-Meter 5/8 Wave

MFJ-1764
$49.95
Ship Code A



MFJ's stacked 5/8 wave radiators give you more than twice the omni-directional gain of a single 5/8 wave radiator!

Wide 10 MHz 2:1 SWR bandwidth . . . excellent ferrite choke balun feedline decoupling . . . shunt choke for bleeding off unwanted static . . . strong lightweight aluminum.

Works as an excellent 6 Meter full half-wave centerfed antenna. Great for MFJ's 6 Meter radios! Mounts vertically for FM/packet or horizontally for SSB. U-bolt (included) to any 1 to 1½ inch mast or tower leg.

MFJ-1766, $119.95. Gives you *four* times the gain of a single 5/8 wave. 2 MFJ-1764 antennas, phasing cables. Double gain on 6M.
MFJ-1765, $34.95. Includes phasing cables for two MFJ-1764s.

MFJ Discone Antenna receives 25-1300 MHz, transmits 50-1300 MHz

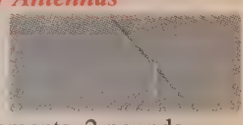
New!
MFJ-1868
$59.95
Ship code B

Ultra wide-band antenna receives 25-1300 MHz. Perfect for scanners. Transmit 50-1300 MHz. Handles 200 Watts. Ideal for 6/2/1¼ Meters, 70/33/23 CM ham bands. Excellent for testing various transmitters on single coax. Includes SO-239 connector, 50 feet coax, stainless steel elements and mounting hardware.

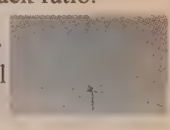
New!
MFJ-1866
$39.95
Ship code B

Same as MFJ-1868, but transmits from 144 to 1290 MHz. Coax and hardware is not included.

MFJ Six Meter Antennas



MFJ-1762, $79.95. 6 Meter Yagi quadruples your effective radiated power over ½ wave dipole. 6 foot boom, 3 elements, 2 pounds. Handles 300 Watts PEP SSB. Mounts vertically or horizontally. Great front-to-back ratio.



MFJ-1756, $79.95. Omni-directional low-angle vertical radiator lets you work plenty of DX in all directions even with low power. 55" strong aluminum radiator.

MFJ *Pulsar*™ Base/Repeater Antenna Series

MFJ's Pulsar™ Base/Repeater Antenna series is built to last! Heavy duty fiberglass radomes and overlapping shells add strength and stability. Stainless steel hardware and waterproof joints elliminate moisture and pollution. *Super high wind load resistance.*

MFJ-1526 - $139.95. *Pulsar ULTRA MightyGain™.* Dual Band 144/440 MHz Base/Repeater Antenna. Our highest gain *Pulsar™* antenna. Great 8.3 dB on 2 Meters and 11.7 dB on 440 MHz. 17 ft., shipped in two sections. SO-239 Connector, handles 200W.

MFJ-1526N - $139.95. Same as MFJ-1526, has **"N" connector**.

MFJ-1524 - $119.95. *Pulsar Hyper MightyGain™.* Dual Band 144/440 MHz Base/Repeater Antenna. You get high gain with little weight. Just 10 feet tall. Features 6.5 dB gain on 2 Meters and 9 dB gain on 440 MHz. Shipped in two sections. SO-239 connector, handles 200 W.

MFJ-1522 - $79.95. *Pulsar Economy Priced Dual Bander™* Base/Repeater Antenna. Only 5.5 ft. tall, but big on gain. Get 4.5 dB gain on 2 Meters and 7.2 dB gain on 440 MHz. Great for antenna restricted households and apartments. Easy to hide on Balcony or backyard. Great Price! SO-239 Connector. Handles 200 W.

MFJ-1516 - $99.95. *Pulsar VHF Base Station™.* The ultimate 2 Meter Base/Repeater Station Antenna! Great 7.8 dB gain is perfect for dedicated repeater or home use. 15ft. shipped in three sections. SO-239 Connector. Handles 200 W.

MFJ-1536 - $119.95. *Pulsar VHF TriBander™.* The Perfect Base/Repeater Antenna for VHF work. Covers 2 Meters, 6 Meters, and 440 MHz. You get 2 dB on 6 Meters, 6 dB gain on 2 Meters, and 8 dB gain on 440 MHz. Only 8.2 ft., shipped in two sections. SO-239 Connector. Handles 200W.

NEW! 220 MHz!

MFJ-1538 - $119.95. *Pulsar VHF Quad-Bander™.* Like MFJ-1536, but covers 6M/144/220/440 MHz.

MFJ-1532N - $99.95. *Pulsar VHF/UHF and 1.2 GHz TriBander™* Base /Repeater Antenna. VHF operation plus exciting 1.2 GHz!! 4.5 dB gain on 2 Meters, 8.3 on 440 MHz, and a whopping 11.7 dB 1.2 GHz. 5½ ft. Type "N" connector. Handles 200 W.

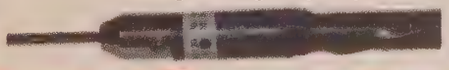
MFJ HF Mobile *HamTenna*™ Whips

Your Choice:

MFJ-1675T - 75 Meters
MFJ-1640T - 40 Meters
MFJ-1620T - 20 Meters
MFJ-1617T - 17 Meters
MFJ-1615T - 15 Meters
MFJ-1610T - 10 Meters
MFJ-1606T - 6 Meters

$19.95 Each
Ship Code B

Each is ruggedly constructed. A heavy duty 4 foot, 3/8 inch diameter fiberglass rod; a nearly indestructible .125 inch diameter PH-17-7 stainless steel whip and chrome plated brass fittings will give you years of dependable service.



It's sleek, low profile construction has low wind loading and its semi-rigid fiberglass eliminates the need for springs or guys.

Black anti-static jacket protects the loading coil and blends with any vehicle. Stainless steel whip is adjustable for lowest SWR.

Includes allen wrench and complete tuning and matching instructions. Handles 250 Watts PEP.

These whips are about 7 feet tall fully extended, and they collapse to about 4 feet for easy storage.

Simply screws into any 3/8x24 female mount for quick band-changing.

MFJ Multi-Band Mobile

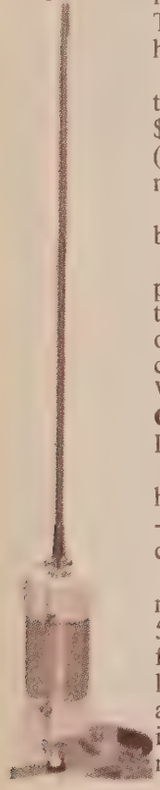
Covers 40 through 6, Plus 144/440!

New!
MFJ-1456
$149.95
Ship Code C

This new mobile antenna covers all of your favorite bands. Four loading coils cover 40/20/15/10/6/2 Meters and 440 MHz bands! You can put up to 4 loading coils on the antenna at one time. SO-239 connector quickly screws onto mirror, luggage or tri-magnet (recommended). **MFJ-336T, $29.95.** *Goliath™* Tri-Magnet mount built to handle the MFJ-1456. 3 super strong 5-inch magnets are bolted to a solid 1/4 inch triangular base -- won't come off.

HF mini-Bugcatcher

MFJ-1624
$79.95
Ship Code C



Become an *"HF Mobileer"* almost instantly with almost no effort! Have tons of fun rag-chewing and DXing on the HF bands. Turn boring drives into fun-filled ham adventures.

It only takes minutes to attach a trunk lip mount (MFJ-345T, $39.95), mirror or luggage mount (MFJ-342, $9.95) or tri-magnet mount (MFJ-336T, $29.95).

Screw in your MFJ-1624 mini bugcatcher HF mobile antenna.

Throw your rig into your car, plug it in the cigarette lighter and turn the power down to 20 Watts or so (to avoid overloading your cigarette lighter; handles 300 Watts PEP).

Operate HF mobile and enjoy DXing!

Bugcatcher design uses large highly-efficient air-wound inductor --it will far out perform other compact HF mobile antennas.

Exclusive *built-in* inductive matching network keeps SWR low. 5½ foot whip collapses to 2½ feet for easy storage and garages. Base loaded for minimum wind load and stress. Change bands by moving "wander lead". 3/8 by 24 inch mount.

MFJ Controller lets you use *ANY* rig with the Yaesu ATAS Series Screwdriver Antenna....

MFJ-1925/I2
$59.95
Ship Code A

The ham world has found the perfect HF/VHF antenna for mobile/portable operation....***the Yaesu ATAS Screwdriver Antenna....***

But, you can't use the antenna unless you have the *MFJ-1925/MFJ-1925 I2 antenna controller.* MFJ made it possible for the popular Yaesu ATAS series antenna to be used with other radios such as the IC-706, TS-50 and others.

The MFJ is installed *in-line* between the antenna and rig. Provides the necessary voltage to move antena up or down when controller is pressed accordingly.

MFJ-1925 I2 is specially designed for the Icom IC-706. It's a perfect match for the 706 and the Yaesu screwdriver antenna. It has a special 706 controller cable with 4-pin connector that mates with the 706 controller port.

When the up/down switch is pressed on the controller, the 706 automatically transmits in low power and turns the antenna for low SWR. When the lowest SWR is found, simply release the tune switch on the MFJ controller. Now you're ready to operate. SWR is monitored by the meter on the 706.

MFJ-1925 I2 is simple to install. No modification to the radio or antenna is necessary. SO-239 connectors for radio and antenna connections. *MFJ-1925 I2* has connection for 13.6 VDC power and 4-pin connector for the 706 antenna port.

Order MFJ-1925 I2 for Icom 706, MFJ-1925 for other transceivers.

New! MFJ Digital Screwdriver Controller

MFJ-1922
$79.95
Ship Code A

Tells you exactly where your antenna is positioned! Re-tune *exactly* -- fast, no more guessing. *Super bright* .40" high-intensity 4-digit LED display and precision micro-controller gives digital count range -999 to +999. On/off/reset switch for easy calibration. 4Wx1½H x2D". Use 13.8VDC.

MFJ-82, $29.95. Remote sensor kit for High Sierra antennas. **MFJ-83, $9.95.** Remote sensor kit for Hi-Q Antennas.

HF Portable/Mobile Manual Screwdriver Antennas

MFJ's new Manually Tuned Screwdriver Antennas lets you operate all bands between 80 and 6 Meters continuously including all WARC bands and the new 60 Meter bands (depends on model). It far outperforms other HF compact antennas.

MFJ's new ***Manually Tuned Screwdriver Antennas*** let you operate *all bands* 80-6 Meters *continuously* including all WARC bands and the new 60 Meter bands (depends on model). It far outperforms other HF compact antennas.

An extra long 10 foot (19" collapsed) telescoping whip lets you really get out and work rare DX! A 4½ foot (23" collapsed) telescoping stainless steel whip is included for mobile and limited space operation.

It has a highly efficient loading inductor. For highest Q, the coil is wound with heavy gauge wire with wide spaced turns on a core that is mostly air.

A tuning sleeve electrically removes turns to eliminate detrimental self-resonance effects that "wander leads" cause. The tuning sleeve is on the low impedance side of the coil to minimize power robbing stray capacitance and detuning hand capacitance effects. Tuning is smooth, easy and sure -- the frequency stays put after you tune it. No tedious back & forth trial & error tuning procedure.

It's extremely rugged -- the whole coil assembly is one unit and does not move. A separate movable sleeve adjusts frequency. A nylon-tipped thumb-screw locks sleeve. Wing nut lets you connect a matching capacitor or inductor for 1:1 SWR. Standard 3/8x24 mounting hardware is used for loading coil and both whips. Use any 3/8x24 mount.

Works great in/outdoors. Handles 200Watts PEP. Add coax, connect ground/counterpoise and you're ready!

Portable Manual Screwdriver Antennas

The MFJ-1661 (40-6 Meters) and the MFJ-1664 (80-6 Meters) are termed *Portable Antennas* because they cover their respective frequency ranges with the *long 10 foot* (19 inches collapsed) telescoping whip for fixed operation. They are smaller and lighter than the mobile versions.

A short 4½ foot (23 inches collapsed) telescoping whip is included for limited space or mobile operation.

MFJ-1661
$119.95
Ship Code C

Covers 40-2 Meters with 10 foot whip. Covers 6-20 Meters with 4 ½ foot whip. 12 inches long by 2 inches in diameter. Weighs one pound.

Portable Versions

New!

Covers 80-6 Meters with 10 foot whip. Covers 6-40 Meters 4½ foot whip. 24 inches long by 2 inches in diameter. Weighs just 1.8 pounds.

MFJ-1664
$149.95
Ship Code C

Mobile Manual Screwdriver Antennas

The MFJ-1662 (40-6 Meters) and the MFJ-1668 (80-6 Meters) are termed *Mobile Antennas* because they cover their respective frequency ranges with the *short 4½ foot* (23 inches collapsed) mobile telescoping stainless steel whip. A 10 foot telescoping whip (19 inches collapsed) is included for *fixed* mobile operation only. It vastly increases efficiency when you are stopped at a hotel or rest stop, etc.

MFJ-1662
$129.95
Ship Code C

Covers 40-2 Meters with 4½ foot *mobile* or 10 foot *fixed operation* telescoping whip. Continuously adjustable loading coil is 15 inches long by 2 inches in diameter and weighs 1.3 pounds.

Mobile Versions

Covers 80-6 Meters with 4½ foot *mobile* or 10 foot *fixed operation* telescoping whip. Continuously adjustable loading coil is 36 inches long by 2 inches in diameter and weighs 2.6 pounds.

MFJ-1668
$159.95
Ship Code C

Long *telescoping* and 108/72" *stainless* whips

All have standard 3/8 inch by 24 threaded stud for use with all standard mounts.

C MFJ-1956, $29.95. Telescopic, 12 feet fully extended, 22.5" collapsed.

D MFJ-1954, $19.95. Telescopic, 10 feet fully extended, 19" collapsed.

Cover 17, 20, 30, 40, 60, 80, 160 Meters with loading coil. Use two for multi-band dipoles.

Replace screwdriver antenna whip for highly efficient *fixed* mobile operation.

12 and 10 Foot whips are durable 1/2 inch diameter plated brass. Telescopes for full 1/4 wave operation 2 to 12/15 Meters.

E MFJ-1952, $14.95. Telescopic, 4.5 feet extended *stainless steel* whip. 22 inches collapsed. Super durable, can be used for mobile or base operation.

A MFJ-1966, $24.95. 108" solid Mobile Whip with 3/8x24 threaded connector.

B MFJ-1964, $19.95. 72" solid Mobile Whip with 3/8x24 threaded connector.

Solid 108 inch and 72 inch whips are solid stainless steel. Great for use with mobile screwdriver antennas.

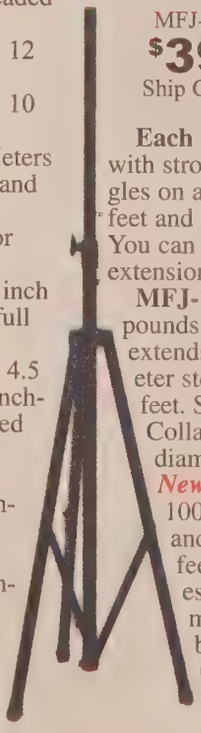
A B C D E

MFJ Portable Antenna Tripods

MFJ-1918
$39.95
Ship Code C

New!

MFJ-1919
$79.95
Ship Code D



Each have black *steel* base forms with strong braced equilateral triangles on a side. They have non-skid feet and strong base and mast locks. You can easily add a mount or mast extension for even greater heights.

MFJ-1918, $39.95, holds 66 pounds of antenna steady and extends up to 6 feet. One inch diameter steel mast extends height to six feet. Strong base and mast locks. Collapses to 38 inches by 4 inch diameter. 6¾ pounds.

New! **MFJ-1919, $79.95,** holds 100 pounds of antenna steady and extends to a ***whopping*** 7.8 feet. Base extends to 693 inches squared. 1.4 inch diameter mast easily accepts most U-bolt antenna applications. Collapses to 38 inches by 4 inch diameter. 9¾ pounds.

HF mini-Bugcatcher

MFJ-1624
$79.95
Ship Code C

Become an *"HF Mobileer"* almost instantly with almost no effort! Have tons of fun rag-chewing and DXing on the HF bands. Boring drives become ham adventures. It only takes minutes to attach a trunk lip mount (MFJ-345T, $39.95), mirror or luggage mount (MFJ-342, $9.95) or tri-magnet mount (MFJ-336T, $29.95). Screw in your MFJ-1624 mini bugcatcher HF mobile antenna.

Throw your rig into your car, plug it in the cigarette lighter and turn the power down to 20 Watts or so (to avoid overloading your cigarette lighter; MFJ-1624 handles 300 Watts PEP). Operate HF mobile and enjoy DXing! This design uses large highly-efficient air-wound inductor -- far out performs other compact HF antennas.

Exclusive *built-in* inductive matching network keeps SWR low. 5½ foot whip collapses to 2½ feet for easy storage and garages. Base loaded for minimum wind load and stress. Change bands by moving "wander lead". 3/8 by 24 inch mount.

33 Foot Telescoping Fiberglass Mast

Collapses to 3.8 feet . . . Weighs 3.3 lbs.

MFJ-1910
$79.95
Ship Code D

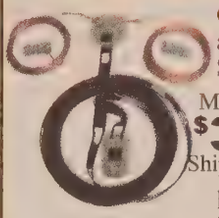
Just pull out each section and twist to lock. **It** extends to a whopping 33 feet - - a full quarter wave on 40 Meters! It collapses to just 3.8 feet and weighs a light 3.3 pounds for true portability. Bottom section is large 1¾-inch diameter. **Super** strong fiberglass flexes to resist breaking. Black resists UV.

Great for portable, temporary use and semi-permanent use - - traveling, camping, from hotels, hamfests, field day, DX-peditions.

Put up a full size inverted Vee, dipole or vertical antenna in minutes and get full size performance.

Use to construct other types of antennas like loops, quads, rotatable dipoles even beams.

MFJ All-Band G5RV Antenna



MFJ-1778
$39.95
Ship Code A

Covers 160-10 Meters with antenna tuner. 102 feet long. Super strong custom fiberglass center insulator provides stress relief for 450 Ohm ladder line. Use horizontally, as inverted vee or sloper. Use on 160 Meters as Marconi with tuner and ground. Handles full 1500 Watts. Add coax, some rope and *you're on-the-air!*

MFJ-1778M, $34.95. *Half-size* 52 ft. *G5RV Junior* covers 40-10 M with tuner. 1.5kW.

MFJ All Band Doublet

MFJ-1777
$49.95
Ship Code A

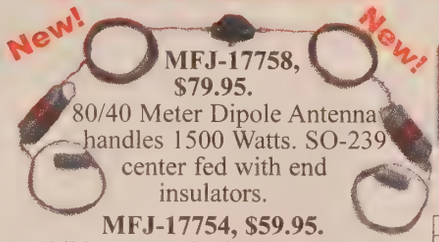
102 ft. all band doublet covers 160-6 Meters with balanced line tuner. Super strong custom fiberglass center insulator provides stress relief for ladder line (100 ft. included). Authentic *glazed ceramic* end insulators. Handles 1.5 kW.

MFJ Single Band Dipole Antennas

MFJ-1779A	MFJ-1779B	MFJ-1779C
$59.95	**$39.95**	**$29.95**
265 ft., 160M	135 ft.,80-40M	35 ft., 20-6M
Ship Code A	Ship Code A	Ship Code A

Ultra high quality center fed dipoles will give you trouble-free operation for years. Custom injection-molded UV-resistant center insulator has built-in coax connector and hanging hole. Heavy duty 7-strand, 14-gauge hard copper antenna wire. Extremely strong solderless crimped construction. Authentic glazed ceramic end insulators. Use as horizontal or sloping dipole or inverted vee. Handles full 1500 Watts. Simply cut to length for your favorite frequency with cutting chart.

HF Wire Antennas



MFJ-17758, $79.95. 80/40 Meter Dipole Antenna handles 1500 Watts. SO-239 center fed with end insulators.

MFJ-17754, $59.95. 40/20 Meter Dipole Antenna handles 1500 Watts. SO-239 center fed with end insulators.

Ceramic Strain Insulators

MFJ-17A01	MFJ-17B01	MFJ-17C01
$1.95 each	**$3.95** each	**$5.95** each

Model	Wire	Hole	Length	Diam.
17AO1	3/16"	5/16"	2-5/16"	1-3/8"
17B01	1/4"	5/8"	31/2"	2-1/2"
17C01	5/16"	3/4"	41/2"	2-7/8"

80/40 M Dipole Antenna

MFJ-1748, $69.95. 80 Meter End-Fed Zepp Antenna with 100 feet of 450 Ohm ladder line. Handles 1500 Watts.

40/20 M Dipole Antenna

MFJ-1742, $79.95. 20 Meter Extended Double Zepp Antenna with 100 feet of 450 Ohm ladder

MFJ Glazed Ceramic Insulator

MFJ-16C01
69¢ each
Single Insulator
Ship Code A

New! MFJ-16C06
$3.95
6-Pack Insulators
Ship Code A

Authentic *glazed ceramic* antenna insulator. Extra-strong - - will not break with long antennas and will not arc over or melt even under full legal power.

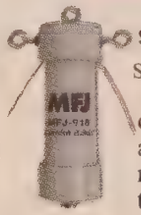
Molded ridges give extra-long high voltage path to prevent high-voltage breakdown. Smooth wire holes prevent wire damage. Use as center or end insulator for dipoles, doublets, G5RVs, guy wires and others.

MFJ-915 RF Isolator

MFJ-915
$29.95
Ship Code A

MFJ-915 *RF Isolator* prevents unwanted RF from traveling on the outside of your coax shield into your transceiver. This unwanted stray RF can cause painful RF "bites" when you touch your microphone or volume control, cause your display or settings to go crazy, lock up your transceiver or turn off your power supply. In mobile installations, stray RF could cause your car to do funny things even blow your car computer. Clear up these problems, plug an MFJ-915 between your antenna and transceiver. *Don't operate without one!* 5x2 inches. For 1.8-30 MHz.

MFJ-918 Current Balun



MFJ-918
$24.95
Ship Code A

True *1:1 Current Balun/ Center Insulator* forces equal antenna currents in dipoles for superior performance. Reduces coax feedline radiation and field pattern distortion -- your signal goes where *you* want it. Reduces TVI, RFI and RF hot spots in your shack. *Don't build a dipole without one!* 50 hi-permeability ferrite beads on high quality RG-303 *Teflon*® coax and *Teflon*® coax connector handles full 1.5kW 1.8-30 MHz. Stainless steel hardware with *direct* 14 gauge stranded copper wire connection to antenna. 5x2 inches. Heavy duty weather housing.

True 4:1 Current Balun/Center Insulators, Balun/Unun

MFJ-913
$29.95
Ship Code A

MFJ-919
$59.95
Ship Code A

The MFJ-913/MFJ-919 are true current baluns/antenna center insulators that transforms 200 ohms to 50 ohms. Transmission Line Transformer construction using 100 ohm characteristic impedance transmission line gives flat 160-10 Meter response. Large low permeability ferrite cores easily handle full power. SO-239, stainless steel hardware with direct 14 gauge stranded copper wire connection to antenna. Heavy duty weather housing.

MFJ-913, $29.95. Handles 300 Watts. 4¼"Hx2" diameter.

MFJ-919, $59.95. Handles 1500 Watts. Sturdy, cube shaped housing measures 3½Wx3½Hx2½D inches.

MFJ-911 is a true 4:1 current balun/unun that transforms 200 ohm balanced and unbalanced loads to 50 ohms. The response is amazingly flat from 160-10 M because it is a true Transmission Line Transformer using 100 ohm characteristic impedance transmission line. Two low permeability ferrite cores are used to easily handle 300 watts. Change balanced to unbalanced operation with handy ground post.2½Wx4¾Hx1D".

New!
MFJ-911
$39.95
Ship Code A

MFJ Antennas for Restricted Areas

MFJ's Super High-Q Loop™ Antennas

MFJ's *tiny* 36 inch diameter loop antenna lets you operate 10 through 30 MHz *continuously* -- including the WARC bands!

Ideal for limited space -- apartments, small lots, motor homes, attics, or mobile homes. Enjoy both DX and local contacts mounted vertically. Get both low angle radiation for excellent DX and high angle radiation for local, close-in contacts. Handles 150 watts.

Super easy-to-use! Only MFJ's super remote control has *Auto Band Selection*™. It auto tunes to desired band, then beeps to let you know. No control cable is needed. Fast/slow tune buttons and built-in two range Cross-Needle SWR/Wattmeter lets you quickly tune to your exact frequency.

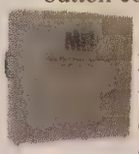
All welded construction, no mechanical joints, welded butterfly capacitor with no rotating contacts, large 1.050 inch diameter round radiator -- not a lossy thin flat-strip -- *gives you highest possible efficiency.*

Each plate in MFJ's tuning capacitor is welded for low loss and polished to prevent high voltage arcing, welded to the radiator, has nylon bearing, anti-backlash mechanism, limit switches, continuous no-step DC motor -- gives smooth precision tuning.

Heavy duty thick ABS plastic housing has ultraviolet inhibitor protection.

MFJ-1788, $429.95. Same as MFJ-1786 but covers 40 - 15 Meters continuous. Includes super remote control.

MFJ-1782, $339.95. Like MFJ-1786 but fast, slow tune button control.



MFJ-1780, $249.95. This *Box Fan Portable Loop* is about the same size (2x2 foot) as a box fan, complete with handle. Covers 14-30 MHz. Remote Control box has fast/slow tunes.

MFJ Apartment Antenna

Covers 40 thru 2 Meters . . . Mounts outdoor to windows, balconies, railings . . . works great indoors mounted to desks, tables, bookshelves

MFJ-1622 Apartment Antenna lets you operate 40 through 10 Meters on HF and 6/2 Meters on VHF with a single antenna!

Its universal mount/clamp lets you easily attach it to window frames, balconies and railings. It also works great indoors mounted to a desk, table or bookshelf. It's not a 5-element yagi, but you'll work your share of exciting DX!

Highly efficient air wound "bug catcher" loading coil and telescoping 5½ foot radiator lets you really get out! Radiator collapses to 2½ feet for easy storage and carrying.

It includes coax RF choke balun, coax feed line, counterpoise wire and safety rope.

The operating frequency is adjusted by moving the "wander lead" on the coil and adjusting the counterpoise for best SWR.

MFJ Vertical for Antenna Restricted Areas

40, 20, 15, 10 Meters, Automatic BandSwitching

Perfect for permanent or portable operation in antenna restricted areas.

MFJ-1795
$149.95
Ship Code D

Hide behind trees, fences, buildings, in bushes -- only 7 to 10 feet tall (adjustable).

Low angle of radiation for DXing, omni-directional, handles 1500 watts PEP.

Highly efficient end-loading. Entire length radiates. Low SWR.

Ground mounts with suitable ground such as MFJ-1904 *Ground-Coupled Antenna Base*, radials or ground rods. Roof mount with radials.

MFJ-1904 P95, $219.00. MFJ-1904 with MFJ-1795 Combination. *Saves $30.90!*

MFJ-1904HG-18, $174.90. MFJ-1904 with Hy-gain AV-18VS. *Saves $15!*
See page 56.

Portable Antenna Base

MFJ-1904
$99.95
Ship Code D

Shown with multi-band Hy-Gain antenna and mount, (not included).

The *MFJ Ground-Coupled Portable Antenna Base*™ gives you a stable way to mount your vertical antenna and provides an effective ground by just plopping down the base and standing on it to push the legs firmly into the ground. It'll support many multi-band verticals.

It's perfect for traveling or for semi-permanent summer/winter homes. You can easily set it up and take down your vertical antenna for stealth operation if you live in an antenna-restricted area.

The MFJ-1904 *Ground-Coupled Portable Antenna Base*™ is a 2x2 foot *stainless steel* square with reinforcing bends that greatly strengthens it. There is a folded and tapered six-inch *stainless steel* leg on each corner.

Two antenna mounts let you use a variety of vertical antennas.

Two handles make carrying and removing the base fast and easy.

You can also attach radials for improved performance.

Stainless steel construction means you'll get trouble-free service for years.

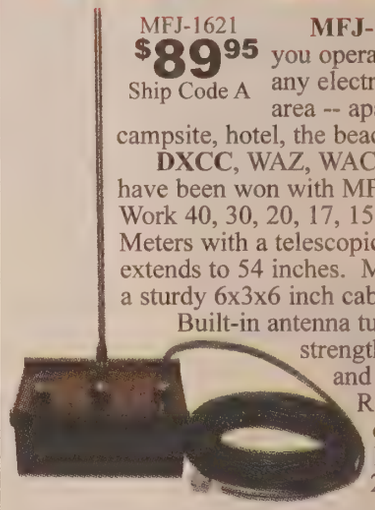
The base is anchored into the ground by stepping on each corner and forcing each leg into the ground. Each *stainless steel* leg is designed to keep the base from tilting.

The base can support a lightweight multi-band vertical antenna -- like the all band Hy-Gain 18AVS and the bandswitching MFJ-1795 -- and provide a semi-permanent installation. You can even hide the base by covering it with dirt.

Built-in antenna mount with SO-239 coax connector and two U-bolts lets you mount most standard and homebrew vertical antennas.

Standard 3/8-inch x 24 mobile antenna mount built-in for MFJ Mobile Whips, bug catchers, *Hustlers* and screwdriver antennas.

10-40 Meter Portable Antenna



MFJ-1621
$89.95
Ship Code A

MFJ-1621 lets you operate in most any electrically free area -- apartment, campsite, hotel, the beach, etc.

DXCC, WAZ, WAC, WAS have been won with MFJ-1621! Work 40, 30, 20, 17, 15, 12 and 10 Meters with a telescopic whip that extends to 54 inches. Mounted on a sturdy 6x3x6 inch cabinet.

Built-in antenna tuner, field strength meter, and 50 feet of RG-58 coax cable. Handles 200 Watts.

10 Bands -- One MFJ Antenna!

Full size performance . . . No ground system or radials

Operate 10 bands: 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with one antenna Separate full size radiators . . . End loading . . . Elevated top feed . . . Low Radiation Angle . . . Very wide bandwidth . . . Highest performance no ground vertical ever . . .

Operate 10 bands -- 75/80, 40, 30, 20, 17, 15, 12, 10, 6 and 2 Meters with this MFJ-1798 vertical antenna and get full size performance with no ground or radials!

Full size performance gives high efficiency for more power radiated. Results? Stronger signals and more Q-5 QSOs.

Full size performance also gives you exceptionally wide bandwidths so you can use more of your hard earned frequencies.

Full size performance is achieved using separate full size radiators for 2-20 Meters and highly efficient end loading for 30, 40, 75/80 Meters.

Handles full 1500 watts PEP

Get very low radiation angle for exciting DX, automatic bandswitching, omni-directional coverage, low SWR. Handles 1500 Watts PEP SSB.

MFJ's unique Elevated Top Feed™ elevates the feedpoint all the way to the top of the antenna. It puts the maximum radiation point high up in the clear where it does the most good -- your signal gets out even if you're ground mounted.

It's easy to tune because adjusting one band has minimum effect on the resonant frequencies of other bands.

Self-supporting and just 20 feet tall, the MFJ-1798 mounts easily from ground level to tower top -- small lots, backyards, apartments, condos, roofs, tower mounts.

MFJ-1798
$289.95
Ship Code F

Separate Full Size Radiators

Separate full size quarter wave radiators are used on 20, 17, 15, 12, 10 and 2 Meters. On 6 Meters, the 17 Meter radiator becomes a 3/4 wave radiator.

The active radiator works as a stub to decouple everything beyond it. In phase antenna current flows in all parallel radiators.

This forms a very large equivalent radiator and gives you incredible bandwidths.

Radiator stubs provide automatic bandswitching -- absolutely no loss due to loading coils or traps.

End Loading

On 30, 40, 75/80 Meters, end loading -- the most efficient form of loading -- gives you highly efficient performance, excellent bandwidth, low angle radiation and automatic bandswitching.

MFJ's unique Frequency Adaptive L-NetworkTM provides automatic impedance matching for lowest SWR on these low bands.

Tuning to your favorite part of these bands is simple and is done at the bottom of the antenna.

No Ground or Radials Needed

You don't need a ground or radials because an effective counterpoise that's 12 feet across gives you excellent ground isolation.

You can mount it from ground level to roof top and get awesome performance.

The feedline is decoupled and isolated from the antenna with MFJ's exclusive AirCoreTM high power current balun. It's wound with TeflonR coax and can't saturate, no matter how high your power.

Built to Last

Incredibly strong solid fiberglass rod and large diameter 6063 T-6 aircraft strength aluminum tubing is in the main structure.

Efficient high-Q coils are wound on tough low loss fiberglass forms using highly weather resistant Teflon® covered wire.

1/2-wave, 6-Band No-radials Vertical

12 feet tall, Mounts Anywhere, 40 to 6 Meters

MFJ-1796
$209.95
Ship Code F

Only 12 feet high with a tiny 24 inch footprint! Mount anywhere -- ground level to tower top -- apartments, small lots, trailers.

Perfect for vacations, field day, DXpeditions, camping.

Efficient end-loading, no lossy traps. Entire length always radiating.

Full size halfwave on 2/6 Meters.

High power *air-wound* choke balun eliminates feedline radiation.

Adjusting one band has minimum effect on others. For 40-20-15, 10, 6, 2 Meters.

Automatic bandswitching, low radiation angle, omni-directional, handles 1500 watts PEP.

Goes together in an afternoon.

In November 1994 *QST* magazine, Top of the DXCC Honor Roll member and Top 10 contester James D. Cain, K1TN, wrote *"This antenna turned out to be a good performer on all bands...a $200 ground-independent vertical that will get you on segments of four HF bands when there's room for nothing else except a small transmitting loop antenna."*

Verticals for 80/40/20 Meters

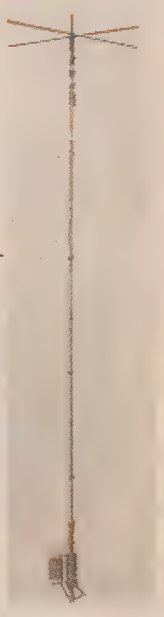
80/40 Meter Vertical

MFJ-1792
$169.95
Ship Code F

MFJ-1792 is a high-performance 80/40 Meter vertical. Full size quarter wave radiator for 40 Meters -- that's 33 feet of radiating power.

End loading, unique built-in L-network for lowest SWR, low-loss fiberglass form, high strength 6061-T6 aluminum tubing, handles 1500 watts PEP.

Requires guying and radials, counterpoise, or ground screen.



80/40/20 Meter Vertical

MFJ-1793, $189.95, like MFJ-1792 but has full size 20 Meter 1/4 wave radiator also.

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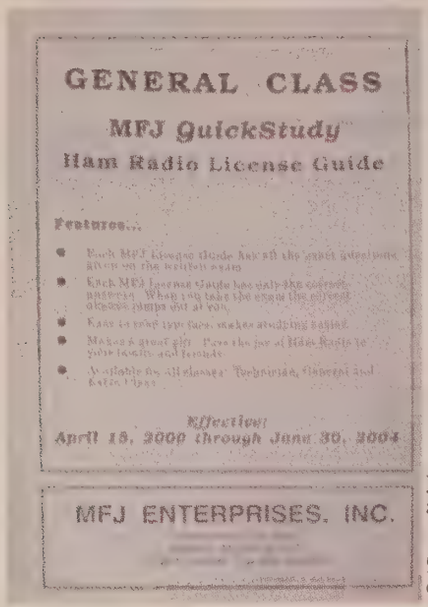
MFJ Publishing guarantees that you'll pass your written exam on your first try . . . if you don't pass we'll refund your money in full* . . . you can't lose! *Send copy of receipt, proof of failure to MFJ within 30 days of failing and we will refund the purchase price of your MFJ *QuickStudy*™. Limit 1 per license class.



MFJ-3211-*Technician*	MFJ-3213-*General*	MFJ-3215-*Extra*

MFJ-3211
MFJ-3213
MFJ-3215
$9.95 each
Technician, General, or Extra Class
Ship Code A

Use MFJ's *QuickStudy*™ License Guide and MFJ guarantees that you'll pass the written exam on your very first try or you get your money back*. See above.

What is MFJ's *QuickStudy*™ concept? The objective is to pass the exam and get your license with a minimum amount of study time so you can start enjoying the hobby right away.

Each MFJ license guide has all of the exact questions given on the written exam. Each question on the exam has a multiple choice answer. But why take the extra time to study the wrong answers? It'll just add to the confusion and doesn't help you pass the exam. ***MFJ gives you only the correct answers.*** When you take the exam the answer jumps out at you -- no confusion, nothing to clutter the mind. It's an instant correct answer because you only studied the right answer.

Study the material thoroughly a few times, pass the test and enjoy the friendship of ham radio -- it couldn't be simpler.

MFJ *QuickStudy*™ License Guides are available for all classes Technician, General and Extra Classes. These books only cover the written part of the test, not the five word-per-minute code exam.

MFJ-3211, *Technician*, MFJ-3213 General Class, MFJ-3215 *Extra Class*, $9.95 each.

MFJ-3507, $19.95. The late Doug DeMaw, W1FB, gives a wealth of info on circuits, including transmitter and receiver fundamentals, mixers, more.

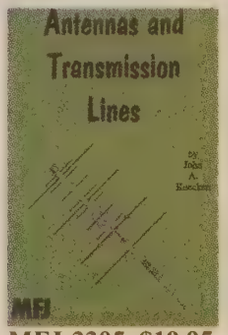
MFJ-3506, $19.95. Legendary textbook from the late Doug DeMaw, W1FB, emphasizes the practical aspect of ferromagnetic core material.

MFJ-3400, $19.95. By avid CW enthusiast David Finley, N1IRZ. First book to detail the Koch method and training techniques for fastest code proficiency.

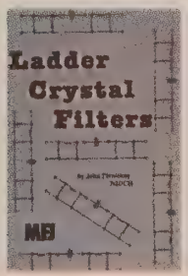
MFJ-3306, $19.95. This is a practical level antenna from the ground up book *by L.B. Cebik, W4RNL.* Concise, clear chapters.

MFJ-3307, $19.95. Volume 2 of L.B. Cebik's Antennas from the Ground Up picks up where volume 1 left off. All new antenna projects!

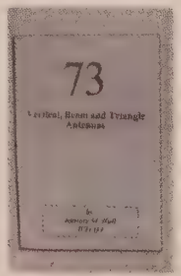
MFJ-38, $16.95. Easy-Up Antennas by Ed Noll, W3FQJ. For hams and SWL. How to build and how to put up. Fully tested designs.



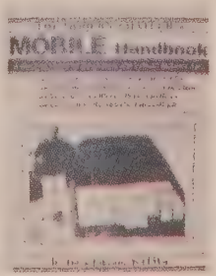
MFJ-3305, $19.95. 320 pages, 37 short concise chapters. Underlying theory, powerful antenna-making techniques, special antenna projects and more!



MFJ-3509, $19.95. Ladder Crystal Filters. Generous references, John Pivnichny, N2DCH.



MFJ-3303, $12.95. "73 Verticals, Beams, Triangle Antennas". By Ed Noll, W3FQJ.



MFJ-33, $12.95. Everything you need to know about mobile! By Dave Ingram, K4TWJ.

MFJ-3501, $19.95. 30 different electronic kit projects, schematics, part placement. ham toys, etc.

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MFJ-3504, $16.95. FET Principles, Experiments and Projects. By Ed Noll, W3FQJ.

MFJ-3510, $19.95. QRP Projects from Down Under. Paddyboard circuit construction, air wound coils.

MFJ-3508, 17.95. Radio Components Handbook. Life's work of Guido Silva, I2EO. 416 ages of circuits, graphs, and theory radio components. *Buku schematics!*

MFJ-37, $9.95. Ham Radio Communications Circuit Files. By Ed Noll, W3FQJ. Many fun items!

MFJ-3036, $12.95. PROH: Packet Radio Operators Handbook. By Buck Rogers, K4ABT.

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MFJ-31, $7.95. Oscar Satellite Review. By Dave Ingram, K4TWJ. An anthology of CQ articles about oscar stations.

MFJ-3101, $7.95. Fox Hunt Adventure. Relive a sense of mystery as young Ben discovers amateur radio and emergency services. Great gift for a young lad.

AL-811 . . . 600 WATTS . . . $649!

More hams use Ameritron AL-811 amplifiers than any other amplifier in the world . . . The AL-811 has earned a worldwide reputation for legendary quality, flawless performance, proven reliability and superb customer service . . .

AL-811
$649
Suggested Retail

Ameritron's AL-811 linear amplifier gives you plenty of power to bust through QRM!

You get a quiet desktop linear that's so compact it'll slide right into your operating position -- you'll hardly know it's there . . . until QRM sets in. And you can conveniently plug it into your nearest 120 VAC outlet -- no special wiring needed.

You get three tough 811A transmitting tubes, extra heavy duty power supply, all HF band coverage, pressurized ventilation, tuned input, dual illuminated meters, adjustable ALC and much more for an incredible $649!

The First 600 Watts makes the difference

The AL-811 gives you 600 Watts PEP output -- that's nearly 2 full S-units over your barefoot rig. That could mean the difference between hearing, *"You're Q-5 armchair copy"* and *"Sorry, can't copy you, too much QRM."*

Now you won't have to stand aside while the *big guns* steal your DX. You'll log some of those stations first.

All band, all mode Coverage

AL-811 covers all HF bands. No compromise on WARC and most MARS bands -- you get a 100% rated output.

Operate AL-811 on all modes. Get 600 Watts output PEP SSB and 500 Watts output CW. You even get 300 Watts on continuous carrier modes like RTTY, SSTV, and FM.

The low cost 811A tubes resists failure because . . . **First**, they're constructed with widely spaced elements that minimize the chance of elements touching and causing a short -- even if the plate gets hot enough to melt.

Second, they use a directly heated thoriated tungsten filament cathode that prevents the electron emitting layer from instantly stripping off -- even if mistuning causes a sudden, severe current overload.

The Ameritron AL-811 is excellent for the newcomer because it's tough enough to withstand momentary mistuning. And the tubes are so inexpensive that you can replace one for mere pocket change.

Extra heavy duty power supply gives you peak performance year after year

The heart of the AL-811 power supply is its heavy duty power transformer with a *high silicon steel* core weighing a hefty 17 pounds.

A full wave bridge using 67.5 mfd of total capacitance (four 270 ufd, 450 volt capacitors) produces 1500 Volts under full load and 1700 Volts no load. That's excellent high voltage regulation!

Rectifier diodes are rated for a massive surge current of 200 amps-- won't blow even if you accidentally short the high voltage supply.

Wire wound, 7 Watt, 50 K Ohm equalizing resistors safely protect each filter capacitor -- *not* 2 Watt, 100 K Ohm carbon composition resistors that can open and cause filter capacitors to explode or fail. Ameritron's AL-811 power supply is built tough so you get peak performance year after year.

Tuned input provides excellent load for any rig

A Pi-Network tuned input provides a 50 Ohm load for your rig. Even fussy solid state rigs can deliver their full drive to the AL-811.

Low loss slug tuned coils -- tunable from the rear panel -- let you optimize performance. High quality low drift silver mica capacitors maintain proper tuning.

Output tank: Optimum Q on each band

The low loss pi-network output tank has been carefully designed for optimum Q on each band and built with top quality RF components.

The result is peak performance over each band, wide impedance matching range and exceptionally smooth tuning with efficiencies close to 70%. Even a 3:1 SWR load won't damage tubes/tank components.

A ball bearing vernier reduction drive makes plate tuning safe, precise and easy.

A quiet blower pressurizes the cabinet with a large volume of air flow. It keeps the 811A tube temperature *well below* the tube manufacturer's rating -- even with a key down carrier at 400 Watts output -- without the *overwhelming* noise of oversized fans.

Two illuminated meters

Two illuminated meters give you a clear picture of your AL-811 operating conditions so you can tell right away if something is wrong.

The Grid Current meter *continuously* checks for improper loading. The other meter switches be-tween high voltage and plate current to warn of abnormal conditions.

Exclusive Adapt-A-Volt™ power transformer

Too high of line voltage stresses components and causes them to wear out and fail. Too low line voltage causes a "soft tube" effect -- low output and signal distortion.

Ameritron's exclusive *Adapt-A-Volt™* power transformer has a special buck-boost winding that lets you compensate for stressful high line voltage and performance robbing low line voltage. Your components last longer and gives you peak performance -- regardless of your line voltage.

Plus much, much more . . .

An Operate/Standby switch lets you run barefoot, but you can in-stantly switch to full power if needed. A transmit LED tells you when your rig is keying your AL-811. A 12 VDC keying relay makes it compatible with all solid state and tube rigs.

Back-pulse cancelling diode protects the rig keying circuit. Shielded RF compartment. One year limited warranty.

Compact 16Dx13¾Wx8 H". 30 lbs. UPS shippable, has transformer installed and wired for 120 VAC. Draws 8 amps at 120 VAC. Export model is AL-811X wired for 240 VAC.

AMERITRON
116 Willow Road, Starkville, MS 39759
Tech: 662-323-8211•Fax: 662-323-6551
www.ameritron.com

800 Watts . . . $799!

Ameritron gives you four 811A tubes, and 800 Watts for the same price as their 3 tube 600W unit . . . Why settle for less power and pay more?

Only Ameritron's AL-811H gives you four *fully neutralized* 811A transmitting tubes. You get absolute stability and superb performance on higher bands that can't be matched by un-neutralized tubes.

Ameritron mounts the 811A tubes *vertically* -- not horizontally -- to prevent hot tube elements from sagging and shorting out. *Potentially damaging horizontal tube mounting* requires special 811A tubes to retard sagging and shorting.

Quiet, powerful computer grade blower draws in plenty of cool air. it pressurizes the cabinet and efficiently cools your 811A tubes. Our air flow is so quiet, you'll hardly know it's there -- unlike noisy, oversized blowers.

Efficient, full size heavy duty tank coils, computer grade capacitors, heavy duty silicon power transformer, slug tuned input coils, operate/standby switch, transmit LED, ALC, dual meters, QSK compatibility with Ameritron's QSK-5 plus more!

AMERITRON Doubles Average SSB Power

AL-80B kilowatt output desktop linear can double your average SSB power output with high-level RF processing...runs cooler because its 3-500 tube completely turns off between words

Ameritron's AL-80B kilowatt output desktop linear can double your average SSB power output with high-level RF processing using Ameritron's exclusive *Dynamic ALC*™.

AL-80B
$1399
Suggested Retail

You get cooler operation because the AL-80B's exclusive *Instantaneous RF Bias*™ completely turns off the classic 3-500 tube between words. It saves hundreds of watts wasted as heat.

You get a full kilowatt PEP output from a whisper quiet desktop linear. It's a compact 8½Hx14Dx15½ inches and plugs into your nearest 120 VAC outlet. Covers all bands 160-15 Meters, including WARC and MARS (10/12 Meters modifiable; FCC license required).

You get 800 watts output on CW, 500 watts output on RTTY, an extra heavy duty power supply, genuine 3-500 tube, nearly 70% efficiency, tuned input, Pi/Pi-L output, inrush current protection, multi-voltage transformer, dual cross-needle meters, QSK compatability, two-year warranty, made in the USA, plus much more!

Dynamic ALC™ doubles average SSB power

The AL-80B's exclusive *Dynamic ALC*™ gives you high-level low-distortion RF processing. It can more than double your average SSB power for up to 6 dB improvement in intelligibility, maximizing talk power without distortion/splatter.

A convenient front panel control lets you adjust output power level.

The AL-80B's exclusive *Instantaneous RF Bias*™ turns off the classic 3-500 tube (except filaments) between words and dots and dashes, elininating hundreds of watts wasted as heat for cooler operation and longer component life.

The guts of the AL-80B is its heavy duty power supply. A 26 pound transformer using a high silicone steel core, computer grade capacitors, heavy duty bleeders and ten 3 amp, 1000 volt power rectifiers give you a stiff 2700 volts fully loaded. Many amps using *two* 3-500s use such small power supplies they don't deliver much more power output than the AL-80B.

The AL-80B is built on a rugged steel chassis with a separate fully-shielded RF compartment to minimize RFI and TVI.

A whisper quiet internal fan draws in cool air over power supply components and pressurizes the classic 3-500 tube compartment to remove heat for longest life.

Tuned input lets your rig deliver full output

50 Ohm broadband Pi-Network tuned input is used. Even fussy solid state transmitters will deliver full power!

A carefully designed Pi/Pi-L output network using the optimum Q for each band gives exceptionally smooth tuning, extremely wide matching range, full band coverage, and peak performance at all power levels.

***Step-Start** Inrush Protection*™ stops damaging inrush current with a start up sequence that's easy on your tube and power supply components.

Our exclusive *Multi-Voltage Power Transformer*™ lets you optimize for 14 different primary line voltages. The high voltage secondary can be wired to reduce plate voltage for efficient operation below 400 watts for use outside the USA.

AMERITRON's dual illuminated cross-needle meters give you four separate meters to monitor your operating conditions -- you can tell right away if something is wrong. Grid and plate current and forward output power are monitored for improper loading and abnormal conditions.

The fourth meter can be switched to monitor your 3-500 tube DC plate voltage, reflected PEP power, antenna system SWR, ALC voltage to your rig, and the grid current that starts ALC action -- get a clear picture of your AL-80B.

The T/R (transmit/ receive) relay in the AL-80B switches nearly as fast as some vacuum relay QSK T/R switches.

Operate/Standby switch lets you run barefoot, but can instantly switch to full power if needed.

Has transmit LED; 12 VDC, 200 mA accessory jack; 12 VDC keying relay for solid state and tube rigs; tough Lexan over-aluminum front panel. Two-year waranty.

Weighs 48 lb. Power required: 120 VAC, 12A. Made in the U.S.A.

AL-572 Offers 1300 Watts PEP SSB on HF at Low Cost

The AMERITRON AL-572 gives you 1300 Watts PEP SSB nominal power output on 160 through 15 Meters, using four rugged 572B tubes with 3 second warm-up time. This whisper quiet, desktop linear plugs into your 120 VAC outlet - no special wiring needed.

You get heavy duty power supply; fully neutralized tubes; pressurized ventilation; multi-voltage power transformer; front panel ALC control; 6:1 vernier drives ... and more!

You'll typically get 1300 Watts PEP SSB, 1000 Watts CW continuous, on all amateur bands from 160 through 15 Meters

AMERITRON's exclusive Instantaneous RF Bias completely turns off the 572B tubes between words and dots and dashes, for cooler operation and longer component life, while Dynamic ALC can more than double your average SSB power.

AL-572
$1445
Suggested Retail

AMERITRON's Step-Start Inrush Protection limits inrush current, greatly extending tube life.

A Pi-Network tuned input using slug tuned coils provides a good 50 ohm load for your rig. A quiet internal fan draws in cool air over power supply components and pressurizes the tube compartment.

Grid current, plate current and forward PEP output power are continuously monitored by dual, lighted cross-needle meters.

A fourth scale switches among peak reflected power (and SWR), high voltage, ALC threshold, and ALC output voltage.

For lightning fast QSK operation use the optional Ameritron electronic PIN diode QSK switch. Shipped wired for 120 VAC. Weighs 40 lb.Power required: 120 VAC, 16 amps.

AMERITRON HF Linear Amplifiers with *Eimac*™ 3CX800A7

AL-800
$1825
One tube

Suggested Retail

AL-800H
$2695
Two tubes

Output power: 1250 watts PEP, single 3CX800A7. 1500 W plus, two 3CX800A7s. 160-15 Meters including WARC bands. Modifiable for 12/10 Meters, FCC license required.

Genuine *Eimac*™ tube(s): AL-800 has a single Eimac 3CX800A7; AL-800H has two Eimac 3CX800A7s, adjustable slug-tuned input circuit.

Output network: Pi/Pi-L gives you smooth tuning and wide matching range. Vernier reduction drives make tuning and loading adjustments smooth and easy.

Tube protection: Grid current limiting circuit protects your tubes. Quiet pressurized ventilation keeps tubes safely cooled.

ALC control: Front panel adjustable, true ALC control.

Hefty power supply: 32 lb. grain orientated, silicone steel core transformer.

Step-Start Inrush Protection: Stops damaging inrush current.

Multi-voltage operation: 14 user-selectable AC line voltage from 90-140; 200-250 VAC.

Dual illuminated cross-needle meters: Read peak forward, reflected, SWR high-voltage, grid/plate current.

Compact 8½Hx16½Dx14¼W in. 52 lb. (AL-800H). Power required: 240 VAC, 14 amps (AL-800H).

AMERITRON...The World's high power leader!

AMERITRON super legal limit amplifiers

These three rugged linears all use a super heavy duty Hypersil(R) power supply capable of 2500 Watts!

Ameritron's AL-1500 Amplifier with *Eimac*(R) 3CX1500A7

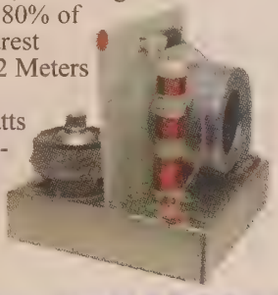
AL-1500
$3045
Suggested Retail

Feel the need for maximum legal HF output power? AMERITRON's AL-1500 will give it to you.

Using the *Herculean 3CX1500A/ 8877* ceramic tube with its high power gain, the AL-1500 needs only 65 watts of drive from your exciter to deliver the goods-- transceivers and other exciters just loaf at 1500 watts out.

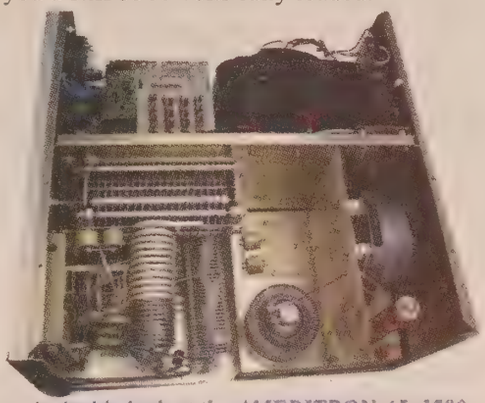
Cool, efficient operation is provided by a forced-air system with tube chimney, using a commercial grade die-cast ball bearing blower for maximum tube life. The tube is further protected by time delay starting and automatic over-current shutoff to remove drive power if the amplifier is mis-tuned.

You get full legal power output from a whisper quiet desktop linear. Measures 18½D x17Wx10H inches, and covers all bands, 160-15 Meters, including WARC and MARS (80% of full output set to nearest amateur band). 10/12 Meters modifiable.



You get 1500 watts output (1/2 hour continuous carrier) and 2500 watts (30 second continuous carrier and 2500 watts-plus 30 minute PEP two-tone test). You get all this power, plus, 65% efficiency, pi-network tuned input, Pi/Pi-L output, inrush current protection, multi-voltage transformer, QSK compatability, and a one-year warranty.

The guts of the AL-1500 is its heavy duty power supply, with a 32 lb. *Peter Dahl Hypersil*(R) trans-former using a high silicone steel core, computer grade capacitors (33 mfd total), heavy duty bleeders and twenty 3 amp, 1000 volt power rectifiers give you a stiff 3300 volts fully loaded.



An inside look at the AMERITRON AL-1500

The AL-1500 is built on a rugged steel chassis with a separate RF compartment fully shielded to keep RF from leaking out, keeping RFI and TVI to a minimum.

Superb RF design and layout, Hi-Q tank circuit and commercially rated RF power components give you 65% plate efficiency over the entire operating range. Power goes into the antenna instead of into heat.

50-ohm broadband Pi-Network tuned input with slug-tuned coils is used. Even fussy solid state transmitters deliver full power!

A carefully designed Pi/Pi-L output network using the optimum Q for each band with vernier ball drives gives smooth tuning, wide matching range, full band coverage, and peak performance at all power levels.

The AL-1500's grid overload circuit protects the tube from excessive grid current; if 175 mA of peak gric current is reached, the "OPR" LED will no longer light and the amplifier will go into a bypass condition until reset by the operator.

Transformer provides many options

Since excessive line voltage stresses components (low line voltage causes a "soft tube" effect, for example), Ameritron's exclusive Multi-Voltage Power Transformer™ lets you optimize for different line voltages. Select from 4 different primary voltage ranges, from 205-219 VAC to 252 to 265 VAC. The amplifier comes wired from the factory for 240 VAC.

The AL-1500 has two *illuminated* panel meters. Grid Current meter provides continuous reading of the critical grid current and indicates proper, safe amplifier operation.

The other meter can be selected to read Plate Voltage, Plate Current, Peak RF Watts, or ALC. A SSB/CW selector switch chooses bias voltage for best linearity on SSB or lowest dissipation on CW.

The Operate/Standby switch, in *Standby*, maintains the tube's filament and plate voltages while allowing "barefoot" operation.

Includes 12 volt DC auxiliary jack and an "XMT" LED to provide indication of proper amplifier keying by the exciter.

Power required: 240 VAC, 15 amps.

Frequency coverage: 1.8,3.5,7,14, 21 MHz & Warc bands. User-modifiable for 28 MHz (FCC license required).

Size:18½Dx17Wx10H". 77 pounds. UPS shippable, 3 boxes.

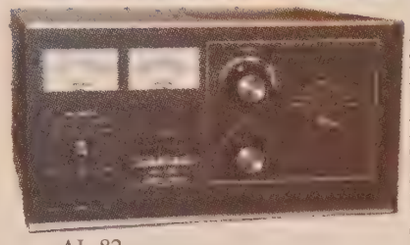
Peter Dahl Hypersil(R) Transformer weighs 32 lbs.

Ameritron's 3CX1200A7 Amplifier

AL-1200
$2645
Suggested Retail

Ham Radio's toughest tube -- the *Eimac*(R) 3CX1200A7 is in ham radio's toughest amplifier! It has a 50-Watt control grid dissipation. It also has the same super heavy duty power supply that's in our AL-1500 amplifier that loafs at full power. A 3CX1200A7 has the lowest quantity history of field replacement of any modern transmitting tube that we use. It has the ruggedness and power handling of ceramic tubes combined with the long-life of thoriated tungsten filaments.

Ameritron's Dual 3-500Z Amplifier



AL-82
$2645
Suggested Retail

This *classic linear* gives you full legal output using a pair of 3-500Z graphite tubes. Examine the features and component ratings of the AL-82 and compare it to any competing amplifier using two 3-500Zs. Most competing amplifiers using 3-500Zs can't give you 1500 Watts because their lightweight power supplies can't use these tubes to their full potential. Our AL-82 amplifier uses the same *Peter Dahl Hypersil*(R) *power transformer* and used in the AL-1500 and AL-1200 amplifiers -- *powerful stuff, just loafs at full power!*

AMERITRON No-Tune Solid-State Amplifier

ALS-600
$1299
Suggested Retail

No tuning, no fuss, no worries -- just turn on and operate. This revolutionary ALS-600 includes a 120/220 VAC power supply, 600 watts output, continuous 1.5-22 MHz coverage, instant bandswitching, no warm up, no tubes to baby, fully SWR protected, extremely quiet, compact.

This is amateur radio's only linear amplifier that uses four rugged TMOS RF power FETs, giving unequaled no-tune solid state performance. **Output** power is 600 watts PEP SSB and 500 watts CW

Upgradeable to include 12/10 Meters with easy-to-install optional kit, ($29.95 plus s/h). FCC license required.

SWR protection prevents amplifier damage if you switch to a wrong band, use wrong antenna, or have high SWR.

Over-power protection looks for excessive output forward power or reflected power and automatically reduces output power to prevent amplifier damage, by controlling ALC to exciter.

This little powerhouse is unobtrusive; its low speed, low volume fan is so quiet you'll hardly know it's there, unlike noisy blowers used in other amps.

At just 6x9½ x 12 inches, the ALS-600 may take up less desktop space than your transceiver, and it weighs just 12.5 pounds.

The illuminated cross-needle SWR/wattmeter reads SWR and forward and reflected peak power simultaneously.

The Operate/Standby switch lets you run "barefoot" but instantly switch to full power if you need it. With the AMERITRON exclusive front panel ALC control you can adjust your output power.

LED indicators for Transmit, ALC, and SWR keep you informed and the rear panel 12 VDC output jack lets you power low current accessories.

The separate ALS-600PS power supply unit (included) can be placed conveniently out of the way and plugged into your nearest 120 VAC outlet. Ameritron's exclusive Multi-Voltage Power Transformer lets you compensate for stressful high line voltage and performance-robbing low line voltage, while Step Start Inrush Protection stops damaging inrush currents and extends life of power supply components. The illuminated cross-needle meter reads voltage and current of 50 VDC line. Includes prewired cable to plug in to ALS-600 amplifier.

ALS-600 switching power supply

This New Ameritron switching power supply weighs only 10 pounds! 6Hx9Wx14½D inches.

ALS-600S, $1428. ALS-600 Amplifier and ALS-600SPS power supply combination.

ALS-600SPS
$629
Suggested Retail

More Radio Horsepower from Your HF Mobile with This No-Tune Linear

ALS-500M
$799
Suggested Retail

Higher power from your mobile! The Ameritron ALS-500M is a no tune, solid state amplifier made for on-the-road use. Get 500 watts PEP SSB output or 400 watts on CW from its four rugged 2SC2879 high power linear RF power transistors. Uses 13 VDC at 80 Amps.

It has instant bandswitching, no tuning, no warm up -- just turn on and operate -- makes mobile QSOs safer.

Less than 100 watts input delivers the full output!

At just 3½x9x15 inches this amp fits in nearly any mobile installation; it weighs only 7 pounds. It's very quiet; the low speed, low volume fan stays off until the temperature rises.

Continuous coverage is from 1.5 to 22 MHz and extendable to 10 and 12 Meters with an easy to install optional kit.

Load Fault Protection (with an LED indicator) disables and bypasses the amplifier if your antenna has excessively high reflected power or if bandswitching is set lower than exciter frequency, virtually eliminating damage from operating error.

Thermal Overload Protection (with LED indicator) disables and bypasses the amplifier if temperature is excessively high; it automatically resets when temperature drops to a safe level.

There's excellent harmonic suppression, with a multiple section output network, push-pull output circuit, and the DC current meter lets you monitor collector current.

ON/OFF switch bypasses the amplifier for "barefoot" operation without having to disconnect high current power supply cables.

Premium Materials Make this HF Mobile "Screwdriver" Antenna Stand Out

1.2 kW capability...3.5-30 MHz continuous...1.5:1 VSWR...commercial gear motor

AMERITRON's SDA-100 may be the best built, best looking, best performing HF mobile screwdriver antenna in the world! When properly installed on your vehicle this antenna provides coverage from 80 through 10 Meters with a 6 foot whip. Remove the whip for 40 through 6 Meters.

What makes our antennas stand above all the rest is that our CNC machined components are from aircraft aluminum or stainless steel and blueprinted, meaning you can take antennas apart and mix them up, then reassemble and they all work the same.

Our fiberglass coil form is approximately 2 inches in diameter. Other antenna builders know fiberglass is better but they choose not to use it because of the expense and difficulty in machining. We use 14 gauge wire for high power capability, wound at eight turns an inch for maximum efficiency. We machine groove our coils so they will not loosen up or jam -- they won't wear out, for years of trouble free service!

The decoupler we use is CNC machined for tight tolerances with custom fingerstock designed to contact 3 turns of coil all the time with over 25 pounds of combined contact pressure. With this design you can run up to 1.2 kilowatts PEP, trouble free. It's so superior to anything else on the market that we put our outstanding AMERITRON warranty behind it.

We use a new heavy duty Pittman commercial 12 volt gear motor, which is very durable and quiet while receive tuning. This motor is super heavy duty for years of trouble-free service. Antennas come with the sensors already installed so if you decide to add an auto controller now or later, everything is ready.

The AMERITRON SDA-100 includes:

Up/Down switch; 5 feet of motor DC cable with detachable weather sealed connector; decoupling toroid matching coils.

The SDA-100 comes in a handsome black finish, using the Dupont Basecoat/Clearcoat system.

Optional accessories:

SDM-100, $75.
Stainless steel flange mount base bracket , with multiple pre-punched holes. The SDA-100 mounting rod is a 1-in. pipe thread 14-in. long. Ship Code B.

SWP-100, $24.95.
6-ft stainless steel whip.

***New!* Combination Price**

SDA-110, $429. Combination of SDA-100 Screwdriver antenna, SDM-100 stainless flange mount, and SWP-100 six foot stainless whip. *SAVES $!!!*

New!

SDC-100, $79.95. Digital Screw-driver controller. See Page 52 for more details.

SRS-100, $29.95. Magnetic sensor kit for High Sierra HF Screwdriver antennas.

SRS-1001, $9.95. Magnetic sensor kit for Hi-Q HF Screwdriver antennas.

AMERITRON *True Legal Limit*™ Tuner

AMERITRON's ATR-30 *True Legal Limit*™ roller inductor antenna tuner is ham radio's toughest! It'll handle 3KW PEP or 1500 Watts *continuous carrier output* on *all* modes and *all* HF bands into most antennas -- even on 160 Meters where most antenna tuners fail.

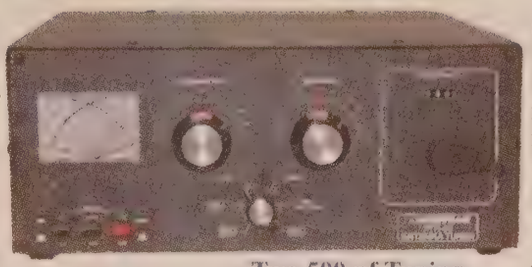
It's perfect for Ameritron's most powerful amplifiers where the ATR-30 just loafs.

All band coverage lets you operate 1.8-30 MHz including all MARS and WARC bands.

Super High Current Roller Inductor

You'll see Ameritron's new *super high current* air core roller inductor. It's *edge wound* from a thick solid copper strip and silver plated. This produces a large surface area and a massive conductor. It can carry huge circulating RF currents and withstand tremendous heat that'll melt or burn ordinary roller inductors.

A gear driven turns counter and crank knob gives you precise inductance control.



ATR-30

$599

Suggested Retail

Two 500 pf Tuning Capacitors

Two 500 pf -- *the highest of any antenna tuner* -- variable transmitting capacitors give you no-arc wide range impedance matching for true high power performance.

6:1 vernier reduction drives makes capacitor tuning smooth and easy.

Super Balun, 6 position Antenna Switch

Super heavy duty three core choke balun lets you match virtually any balanced feedline antenna without core saturation.

A 6 position antenna switch lets you select your desired operating antenna.

Read *true* Peak Power

Ameritron's active electronic *true* peak reading meter accurately reads forward and reflected power and SWR *simultaneously* on a lighted Cross-Needle meter.

Roomy Cabinet maintains High-Q

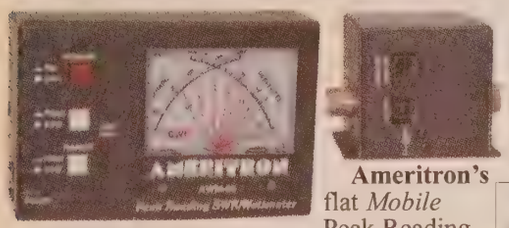
Roomy extra-strong .080 inch thick aluminum cabinet gives highest efficiency and lowest loss. 13¼Wx5⅝Hx17½D inches. Has Ameritron's superb one year limited warranty with legendary customer service.

ATR-20 Antenna Tuner . . . $459

Handles 1.2 kW PEP SSB. Slightly less on 160 Meters. 13½Wx5½H x13¼D inches. Roller inductor T-network, peak reading SWR/Wattmeter, covers 1.8-30 MHz, 6 position antenna switch, balun. Great for Ameritron's 1kW AL-80B Amp!

AMERITRON has the best selection of high power accessories!

Flat Mobile Wattmeter mounts on dashboard . . . AWM-35, $159.95



Ameritron's flat *Mobile* Peak Reading SWR/Wattmeter is just 1⅝" thick -- easily mounts on your dashboard for easy viewing. Flat mount on wall or shelf in your ham shack for best viewing angle. Remote sensor with 25 feet thin, flexible cable lets you place sensor and coax out-of-the-way. Handles full 1500 Watts, 1.8-30 MHz. Lighted Cross-Needle meter. *Active* electronics lets you read *true* peak or average power in 3000/300 Watt ranges. "High SWR" LED. 5Wx3¼Hx1⅝D"; sensor is 3½Wx2¾H x2¾D". Use 9V battery or 12 VDC.

AWM-30 Precision SWR Wattmeter . . . $149.95

This precision SWR/Wattmeter is perfect for making accurate linear amplifier power measurements. Reads true peak or average power on lighted cross-needle meter.3000/ 300 Watt ranges, remote sensor. Use 9V battery or 12 VDC.

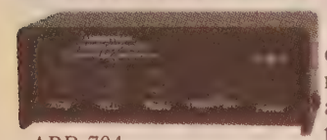
ADL-1500 Dummy Load with oil . . . $69.95

Oil cooled 50 Ohm dummy load handles 1500 Watts for 5 minutes. SWR under 1.2 to 30 MHz. Low SWR to 400 MHz. High quality industrial grade transformer oil (no PCB), heavy duty 50 Ohm resistor. **ADL-1500X, $49.95.** Dummy load without oil.

ADL-2500 Fan cooled 2500W dry dummy load ...$199.95

Whisper quiet fan. Handles any legal limit amplifier -- 2500 Watts average power for 1 minute on, ten off. 300 Watts continuous. SWR below 1.25 to 30 MHz and SWR below 1.4 to 60 MHz.

AMERITRON *Amplifier-to-Transceiver* Interface



ARB-704

$49.95

ARB-704I2 for IC-706s

Amplifiers can damage radios if the amplifier has too much relay control voltage, voltage spikes, or excessive current on the relay control line.

The ARB-704 advanced interface is compatible with all common radios and amplifiers even though radios and amplifiers do not have standardized voltages, accessory plugs, or wiring. Designed to work with any amp/radio combo.

The input is designed to be compatible with any transmitter or transceiver, and the output is compatible with AC or DC positive or negative amplifier control lines having up to 200 Volts peak open circuit voltage and 300 mA of current.

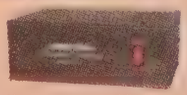
Operates with rigs that pull amplifier control lines to ground, or output a wide range of positive or negative control voltages. Don't take a chance! Get the ARB-704 now! 4¼Wx1¾Hx2¾D". Power cord, 3 phono cords for relay/ALC/control included.

Extra cable, $15.95 for following rigs:

Model#	Transceivers
PNP-8D	FT-1000, (MP), 900, 767GX, 920, 990, 747GX
PNP-8M	FT-890, 840, 817, 857, 897
PNP-35	FT-100, (D)
PNP-5M	FT-847
PNP-7D	TS-440, 690, 450, 180, 140, 950, 130, 870, 2000, 50, 120, 530, 430, 830, 949, 570
PNP-13D	All models of the IC-706 series
PNP-7DK	TS-930
PNP-7DK2	TS-520
PNP-8MK	TS-480
PNP-5D	FT-980
PNP-5DY	FT-890

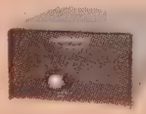
A plug-and-play cables is not needed if your radio is not listed.

QSK-5 Pin Diode Xmit/Receive Switch...$349



World's most advanced Transmit/Receive Switch. Gives high power QSK operation from your linear amplifier. Self-contained, connects externally to most HF amps. Handles 2.5 kW PEP, 2 kW CW. Six times faster than vacuum relay.

ARF-1000 RF Filter . . . $159



Use with transceiver or amplifier that produces unwanted harmonics. Frequency select switches to 1 of six different ranges, 1.5-30 MHz. When the filter is selected it reduces harmonics above cut-off frequency. Handles 1 kW SSB input power, 600W CW or 400W RTTY. SWR less than 1.3:1 on all ham bands. SO-239 in/output. 5½Wx3½Hx9½D".

ATP-100 AMP Tuning Pulser . . . $49.95

Pulse tuning safely tunes up your amp for full power output and best linearity. Keeps average power to low safe level to prevent overheating, tube damage, power supply stress and premature component failure. **ATP-102, $59.95**, similar, variable pulser and delay.

Add-on Electronic Bias System . . . $39.95 for AL-80A82/1200/1500 Amps

EBS-1, $39.95. EBS reduces heat by reducing quiescent current to low values during periods when exciter output falls below 100 mW. Features remote detector board. **EBS-1H, $49.95,** for other amplifiers. Call 662-323-8211 for details.

ICP-120/240 Inrush Current Protector . . . $79

Stops power-up inrush current and absorbs momentary high voltage spikes to protect your amp, tubes and power supply components. By starting your linear amplifier through a high power current limiting resistor and then shorting the resistor with a relay, the start-up sequence is easier on your tube and power supply components. Avoids replacing expensive tubes and parts. Works with nearly all linear amplifiers. Limits current to 12 Amperes during heavy draw inrush period, 20 Amperes during continuous operating current. **ICP-120, $79**, for 120 Volt wired amplifiers. **ICP-240, $79**, for 240 Volt wired amplifiers.

AMERITRON RCS-8V Remote Coax Switch

New *Lightning Protected model RCS-8VL, $189* *New*

RCS-8V **$149** Suggested Retail

Ameritron's Remote Coax Switch lets you remotely switch up to five separate antennas using one inexpensive small control line (like standard telephone wire) -- ***Eliminate*** a tangle of troublesome coax and have a simple and neat installation -- with just a single coax feedline.

The RCS-8V consists of two units -- the weatherproof switching box that mounts on your tower or mast and the control unit that's placed at your operating station.

VSWR is less than 1.2 from DC to 250 MHz and less than 0.1 dB loss at 150 MHz -- if you operate HF/VHF/UHF, the RCS-8V is for you.

It handles over 5 kW below 30 MHz and 1 kW at 150 MHz. You can ground unused positions or leave them open.

The indoor control unit is all metal to prevent RFI and TVI. It also has LEDs to indicate the antenna you've selected.

A Lexan scratch proof front panel has a markable surface for labeling your antennas.

RCS-8V operates from a 120 VAC power source or RCS-8VX for 220/240 VAC. Use any 6 conductor control line (not supplied) and allows safe operation with 14V control voltage.

RCS-8VN, $159. Same as RCS-8V but has N- type connectors instead of SO-239.

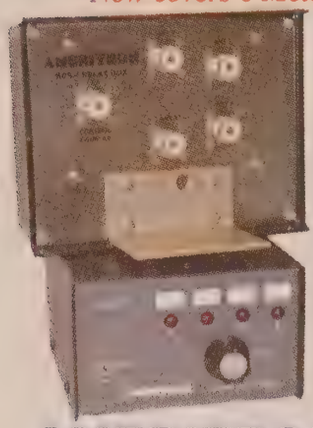
SPECIFICATIONS:

Number of antenna positions: 5. **Loss at 150 MHz:** less than 0.1 dB. **VSWR:** under 1.2:1 from DC to 250 MHz. **Impedance:** 50 Ohms. **Power Capability:** >5 kW below 30 MHz, 1 kW at 150 MHz. **Power requirements:** 120 VAC, 50/60 Hz at five watts. **Connectors:** *Teflon*(R) SO-239 for RCS-8V; "N" for RCS-8VN. **Control Box:** 6Dx6 1/8W x2 1/4H inches. **Switch Box:** 5 3/8Dx7Wx3H inches.

AMERITRON RCS-4 *Remote Coax Switch*

Now covers 6 Meters . . . improved relays . . . Greater Power Handling!

New *Lightning Protected model RCS-4L, $179* *New*



RCS-4 **$139** Suggested Retail

Ameritron RCS-4 is a remote controlled coax switch that selects 1 of 4 outputs by supplying all control voltages through the coax. Elimin-ation of control cables gives you a fast, neat and inexpensive installation -- *only 1 coax line for 4 antennas.*

You get two units -- the switching box (5 3/8Dx7Wx3H in.) that can be tower, mast or wall mounted and the control console (6 1/8Dx5 1/4Wx 3 3/8H in.) that is located at your operating station.

The attractive indoor console has bright LED antenna selector indicators. A steel enclosure provides 100% shielding to prevent RFI and TVI. **Switching** time is 50 milliseconds. *Teflon*(R) SO-239 connectors provide reliable connections.

The weatherproof switching box uses three heavy duty 16 ampere hermetically sealed relays on a rugged G-10 fiberglass circuit board.

Quality components are used throughout the entire unit to ensure maximum life for the sometimes difficult-to-reach switching box. RCS-4 operates 120 VAC. RCS-4X for 220/240 VAC. RCS-4 allows safe operation with 14 Volts control voltage.

Frequencies 1.5 - 100 MHz are covered by this excellent station accessory. Handles over 2.5 kW.

Specifications: 4 pos.; **Loss** at 30 MHz less than 0.1 dB; VSWR is under 1.25:1, 1.5-60 MHz; **Impedance:** 50 Ohms; **Power:** >2.5 kW average continuous.

AMERITRON RCS-10 *Remote Coax Switch*

New *Lightning Protected model RCS-10L, $199* *New*

RCS-10 **$159** Suggested Retail

Ameritron's RCS-10 remote coax switch selects one of eight antennas using an inexpensive three or four conductor control line (such as standard telephone wire).

New! **RCS-10L, $199.** Same as RCS-10, but has lightning protection for all coaxial inputs.

Eliminate a tangle of troublesome coax and have a simple and neat installation -- with just a single coax feedline. RCS-10 consists of 2 units -- the weatherproof switch box that mounts on your tower or mast and the control unit that's placed at your operating station.

Outdoor Unit Features:

Inexpensive and simple wiring: selects up to eight antennas using one four conductor telephone type control line.

High Power Capability: The RCS-10 relay box will handle over 5 kW into matched loads below 30 MHz.

Long Relay Life: UL/CSA/VDE approved sealed relays with 16A switching current rating. Tested to withstand 1200V RMS. **Flexible Mounting:** RCS-10 hardware accepts mast sizes from 1 inch to 2 1/4 inches. **Reliable Connectors:** Teflon UHF-style SO-239 females, internal barrier strip for control lines. **Low Voltage:** Requires 10-15 Volts at less than 300 mA. **Number of Antenna Positions:** 8. **Frequency Coverage:** DC to 100 MHz. **VSWR:** Under 1.25:1 below 30 MHz; Under 1.3:1 below 60 MHz; Under 1.8:1 below 150 MHz. **Impedance:** 50 Ohms. **Power Capability:** >5 kW into 50 Ohms below 30 MHz. **Power Requirement:** RCS-10, 10-15 VDC or 120 VAC with AC adaptor supplied. RCS-10X, 10-15 VDC or 230 VAC with AC adaptor supplied. **Relay Switch Control Line:** 4 conductors telephone-type cable, not supplied. **Relay Control Line Voltage:** 10-15 VDC at less than 300 mA. **Flexible Control Box with External Interface:** Accepts and outputs one-of-eight and outputs three-line BCD data to remote relay unit. **Highly Weather Resistant:** Sealed relays, stainless hardware, and U-V resistant cover. **Easy-to-Read Antenna Indicators:** Eight wide-spaced LED's indicate the selected antenna. **Dimension:** *Control:* 6 1/4Wx3 1/4Hx4 5/8D in.

Digital Screwdriver Antenna *Controller*

Ameritron's *Digital Screwdriver Antenna Controller* tells you exactly where your antenna is positioned! Re-tune *exactly* -- fast, no more guessing. *Super bright* .40" high-intensity 4-digit LED display and precision micro-controller gives digital count range -999 to +9999. Plus and minus signs tells you if you're going up or down. Large momentary *rocker switch* makes up/down antenna control easy. Has On/off/reset switch for easy calibration. Works with Ameritron SDA-100, Tarheel and other screwdrivers with a single or dual magnetic switch sensor. 4Wx2 5/8Hx1 1/2D". Use 13.8VDC. **SRS-100, $29.95.** *High Sierra* sensor kit. **SRS-1001, $9.95**. *Hi-Q* sensor kit.

SDC-100 *New!* **$79.95** suggested retail

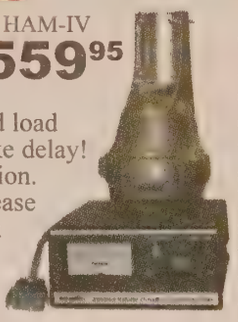
Extended Warranty Plans

Get Ameritron's extended protection plan while you still can -- before your warranty runs out! It's the same as your original warranty, just extended for the number of months you choose to purchase. If the product should fail during the agreed term, Ameritron has the option to repair/replace part(s) (except tube and output transistors) and provide necessary labor free at Ameritron. Ameritron is not responsible for shipping loss or damage. *Call!*

hy-gain ROTATORS

. . . the first choice of hams around the world!

HAM-IV

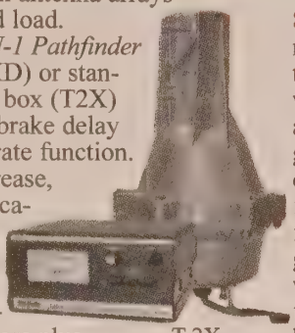


HAM-IV
$559.95

The most popular rotator in the world! For medium communications arrays up to 15 square feet wind load area. *New* 5-second brake delay! *New* Test/Calibrate function. *New* low temperature grease permits normal operation down to -30 degrees F. *New* alloy ring gear gives extra strength up to 100,000 PSI for maximum reliability. *New* indicator potentiometer. *New* ferrite beads reduce RF susceptibility. *New* Cinch plug plus 8-pin plug at control box. Dual 98 ball bearing race for load bearing strength and electric locking steel wedge brake prevents wind induced antenna movement. North or South center of rotation scale on meter, low voltage control, max mast size of $2^{1}/_{16}$ inches.

HAM IV and HAM V Rotator Specifications	
Wind Load capacity (inside tower)	15 square feet
Wind Load (w/mast adapter)	**7.5 square feet**
Turning Power	800 in.-lbs.
Brake Power	**5000 in.-lbs.**
Brake Construction	Electric Wedge
Bearing Assembly	**dual race/96 ball bearings**
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	**8**
Shipping Weight	26 lbs.
Effective Moment (in tower)	**2800 ft.-lbs.**

TAILTWISTER SERIES II



For large medium antenna arrays up to 20 sq. ft. wind load. Available with *DCU-1 Pathfinder* digital control (T2XD) or standard analog control box (T2X) with *new* 5-second brake delay and *new* Test/Calibrate function. Low temperature grease, alloy ring gear, indicator potentiometer, ferrite beads on potentiometer wires, *new* weatherproof AMP connectors plus 8-pin plug at control box, triple bearing race with 138 ball bearings for large load bearing strength, electric locking steel wedge brake, North or South center of rotation scale on meter, low voltage control, $2^{1}/_{16}$ inch max. mast.

T-2X
$649.95

T-2XD
$1029.95
with DCU-1

TAILTWISTER Rotator Specifications	
Wind load capacity (inside tower)	20 square feet
Wind Load (w/ mast adapter)	**10 square feet**
Turning Power	1000 in.-lbs.
Brake Power	**9000** in.-lbs.
Brake Construction	Electric Wedge
Bearing Assembly	**Triple race/138 ball brngs**
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	**8**
Shipping Weight	31 lbs.
Effective Moment (in tower)	**3400 ft.-lbs.**

CD-45II

For antenna arrays up to 8.5 sq. feet mounted inside tower or 5 sq. ft. with mast adapter. Low temperature grease good to -30 F degrees. *New* Test/Calibrate function. Bell rotator design gives total weather protection, dual 58 ball bearing race gives proven support. Die-cast ring gear, stamped steel gear drive, heavy duty, trouble free gear train, North center scale, lighted directional indicator, 8-pin plug/socket on control unit, snap-action control switches, low voltage control, safe operation, takes maximum mast size to $2^{1}/_{16}$ inches. MSLD light duty lower mast support included.

CD-45II
$389.95

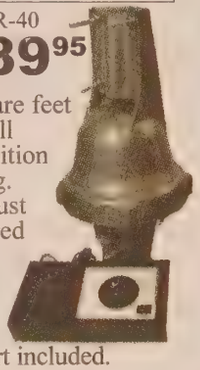
CD-45II Rotator Specifications	
Wind load capacity (inside tower)	8.5 square feet
Wind Load (w/ mast adapter)	**5.0 square feet**
Turning Power	600 in.-lbs.
Brake Power	**800 in.-lbs.**
Brake Construction	Disc Brake
Bearing Assembly	**Dual race/48 ball brings**
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	**8**
Shipping Weight	22 lbs.
Effective Moment (in tower)	**1200 ft.-lbs.**

HAM-V

HAM-V
$949.95
with DCU-1

For medium antenna arrays up to 15 square feet wind load area. Similar to the HAM IV, but includes *DCU-1 Pathfinder* digital control unit with gas plasma display. Provides automatic operation of brake and rotor, compatible with many logging/contest programs, 6 presets for beam headings, 1 degree accuracy, auto 8-second brake delay, 360 degree choice for center location, *more!*

AR-40



AR-40
$289.95

For compact antenna arrays and large FM/TV up to 3.0 square feet wind load area. Dual 12 ball bearing race. Automatic position sensor never needs resetting. Fully automatic control -- just dial and touch for any desired location. Solid state, low voltage control, safe and silent operation. $2^{1}/_{16}$ inch max mast size. MSLD light duty lower mast support included.

AR-40 Rotator Specifications	
Wind load capacity (inside tower)	3.0 square feet
Wind Load (w/ mast adapter)	**1.5 square feet**
Turning Power	350 in.-lbs.
Brake Power	**450 in.-lbs.**
Brake Construction	Disc Brake
Bearing Assembly	**Dual race/12 ball bearings**
Mounting Hardware	Clamp plate/steel bolts
Control Cable Conductors	**5**
Shipping Weight	14 lbs.
Effective Moment (in tower)	**300 ft.-lbs.**

HDR-300A

HDR-300A
$1379.95

For *king-sized* antenna arrays up to 25 sq.ft. wind load area. Control cable connector, *new* hardened stainless steel output shaft, *new* North or South centered calibration, *new* ferrite beads on potentiometer wires reduce RF susceptibility, *new* longer output shaft keyway adds reliability. Self-centering steel clamp/hardware. Display accurate to 1°. Machined steel output.

HDR-300A Rotator Specifications	
Wind load capacity (inside tower)	25 square feet
Wind Load (w/ mast adapter)	**not applicable**
Turning Power	5000 in.-lbs.
Brake Power	**7500 in.-lbs.**
Brake Construction	solenoid operated locking
Bearing Assembly	**bronze sleeve w/rollers**
Mounting Hardware	stainless steel bolts
Control Cable Conductors	**7**
Shipping Weight	61 lbs.
Effective Moment (in tower)	**5000 ft.-lbs.**

ROTATOR OPTIONS

MSHD, $99.95. Heavy duty mast support for T2X, HAM-IV and HAM-V.
MSLD, $39.95. Light duty mast support for CD-45II and AR-40.
TSP-1, $34.95. Lower spacer plate for HAM-IV and HAM-V.

Digital Automatic Controller

DCU-1
$649.95

Controls T2X, HAM IV and HAM V. Auto operation of brake/ rotor, computer control with RS232 pass-through, compatible with many logging/contest programs, 6 presets for favorite beam headings, 1 degree heading accuracy, Auto 8-sec. brake delay, 360 degree choice for center of rotation!

AR-35 Rotator/Controller

AR-35
$69.95

The AR-35 is designed for the use of small UHF, VHF, 6-Meter, TV and FM antennas. Includes automatic controller, rotator, mounting clamps and mounting hardware. Uses 110 VAC. 1 Year Warranty.

Rotator Auto Brake Delay

NEW!
RBD-5
$29.95

RBD-5 allows a automatic 5 second brake delay for your *Hy-Gain* rotator. This delay insures that the rotator is fully stopped before the brake is engaged. No more accidentally engaging brake while the rotator is in movement. Use with HAM II, III, IV, V, T2Xs. Easy-to-install. Includes pre-assembled PCB and hardware.

hy-gain HF BEAMS...

. . . are stronger, lighter, have less wind surface and last years longer.

TH-11DX, $1159.95. 11-element, 4.0 kW PEP, 10,12,15,17,20M

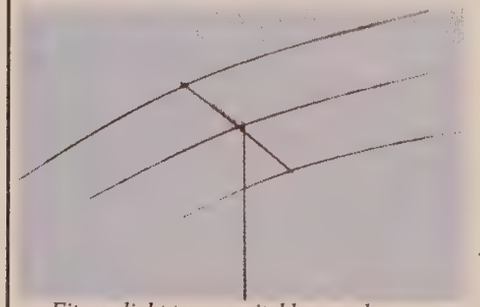
The choice of top DXers. With 11-elements, excellent gain and 5-bands, the super rugged TH-11DX is *the "Big Daddy" of all HF beams!* Handles 2000 Watts continuous, 4000 Watts PEP.

Every part is selected for durability and ruggedness for years of trouble-free service. Features a low loss log-periodic driven array on all bands with monoband reflectors, BN-4000 high power balun, corrosion resistant wire boom support, hot dipped gal-vanized and stainless steel parts.

Stainless steel hardware and clamps are used on all electrical connections.

Compact 3-element 10, 15, 20 Meter Tri-Bander

For limited space . . . Installs anywhere . . . 14.75 ft turning radius . . . weighs 21 lbs . . . Rotate with CD-45II, HAM-IV



Fits on light tower, suitable guyed TV pole, or roof tri-pod.

TH-3JRS, $359.95.

Hy-Gain's *most popular* 3-element 10, 15, 20 Meter tri-bander fits on most lots!

Same top performance as the full power TH3MK4 in a compact 600 watt PEP design.

Excellent gain and F/B ratio let *you* compete with the "big guns".

Tooled manufacturing gives you *Hy-Gain* durability with 80 MPH wind survival.

TH-7DX, $869.95. 7-element, 1.5 kW PEP, 10,15,20 Meters

7-Elements gives you the *highest average gain* of any Hy-Gain tri-bander! Dual driven for broadband operation without compromising gain. SWR less than 2:1 on *all* bands. Combined monoband and trapped parasitic elements give you an excellent F/B ratio. *Hy-Gain's* diecast aluminum, rugged boom-to-mast clamp, heavy gauge element-to-boom brackets, BN-86 balun. For high power, use BN-4000.

TH-5MK2, $759.95. 5-element, 1.5 kW PEP, 10,15,20 Meters

The broadband *five element* TH5-MK2 gives you outstanding gain. Separate air dielectric *Hy-Q* traps let you adjust for maximum F/B ratio on each band. Has *Hy-Gain's* exclusive *BetaMATCH*™, stainless steel hardware and compression clamps and BN-86 balun.

TH-3MK4, $469.95. 3-element, 1.5 kW PEP, 10,15,20 Meters

The super popular TH-3MK4 gives you the *most gain for your money* in a full-power, full-size durable Hy-Gain tri-bander! Impressive average gain and whopping average front-to-back ratio. Handles 1.5 kW PEP. 95 MPH wind survival. Fits on average lot -- turning radius is just 15.3 feet. 4-piece boom is ideal for DXpeditions. Choose CD-45II or HAM-IV rotator. *Hy-Gain BetaMatch*™ for DC ground, full power *Hy-Q*™ traps, rugged boom-to-mast bracket and mounts on standard 2"O.D. mast. Stainless steel hardware. BN-86 balun recommended.

TH-2MK3, $369.95. 2-element, 1.5 kW PEP, 10,15,20 Meters

The 2-element TH-2MK3 is Hy-Gain's *most economical* full power (1.5kW PEP) full size tri-bander. Increase your effective radiated power and hear far better! Ruggedly constructed, top-performing, compact 6 foot boom, tight 14.3 foot turning radius. Installs almost anywhere. Rotate with CD-45II or HAM-IV. Use BN-86 balun.

EXP-14, $599.95. 4-element, 1.5 kW PEP, 10,15,20 Meters

Revolutionary 4-element compact tri-bander *can add 40 or 30 Meters!* 14 foot boom and tight 17.25 feet turning radius. Fits on roof tri-pod, mast or medium duty tower. Hy-Gain's *patented* broadbanding *ParaSleeve* gives you less than 2:1 VSWR. 1.5kW PEP. *BetaMATCH*™ provides DC ground to eliminate static. Has BN-86 balun. **QK-710, $169.95.** 30/40 Meter option kit for EXP-14.

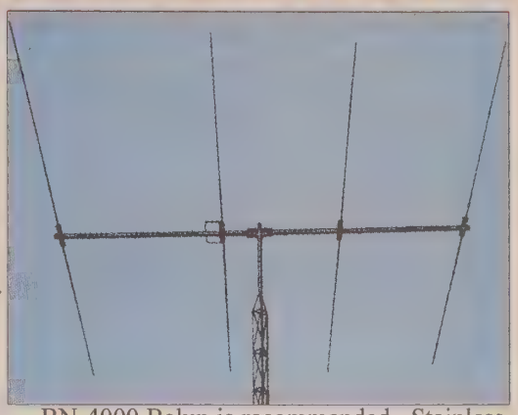
DB-1015, $449.95. 7-element, 1.5 kW PEP, 10 & 15 Meters

This dual band beam for 10 and 15 Meters incorporates *Hy-Gain's* superior mechanical design and has been computer optimized and range-tested for max performance. **DB-1015** features a 14 foot boom in 4 sections. Handles full legal power and has *Hy-Gain's* rugged boom-to-mast clamp. **DB-1217, $449.95.** Similar to DB-1015, but is dual band coverage for 12 and 17 Meters.

Model No.	No. of elements	avg gain dBi	avg F/B gain	MaxPwr watts PEP	Bands Covered	Wind sq.ft. area	Wind (mph) Survival	Boom (feet)	Longest Elem. (ft)	Turning radius(ft)	Weight (lbs.)	Mast dia O.D.(in.)	Recom. Rotator	Retail Price
TH-11DX	11	8.4	22	4000	10,12,15,17,20	12.5	100	24	37	22	88	1.9-2.5	T2X	$1159.95
TH-7DX	**7**	**8.77**	**21**	**1500**	**10, 15, 20**	**9.4**	**100**	**24**	**31**	**20**	**75**	**1.5-2.5**	**HAM-IV**	**$869.95**
TH-5MK2	5	8.3	20	1500	10, 15, 20	7.4	100	19	31.5	18.42	57	1.5-2.5	HAM-IV	$759.95
TH-3MK4	**3**	**8.0**	**25**	**1500**	**10, 15, 20**	**4.6**	**95**	**14**	**27.42**	**15.33**	**35**	**1.9-2.5**	**CD-45II**	**$469.95**
TH-3JRS	3	8.0	25	600	10, 15, 20	3.35	80	12	27.25	14.75	21	1.25-2.0	CD-45II	$359.95
TH-2MK3	**2**	**5.6**	**15-20**	**1500**	**10, 15, 20**	**3.25**	**80**	**6**	**27.3**	**14.25**	**20**	**1.9-2.5**	**CD-45II**	**$359.95**
EXP-14	4	8.1	25	1500	10,15,20	7.5	100	14	31.5	17.25	45	1.9-2.5	HAM IV	$599.95
DB-1015	**7**	**9.8**	**22**	**1500**	**10, 15**	**6.7**	**115**	**14**	**29.5**	**16.3**	**40**	**1.5-2.5**	**HAM IV**	**$449.95**
DB-1217	7	9.8	22	1500	12, 17	6.7	115	14	29.5	16.3	40	1.5-2.5	HAM IV	$449.95

Hy-Gain Long Johns HF Monobanders

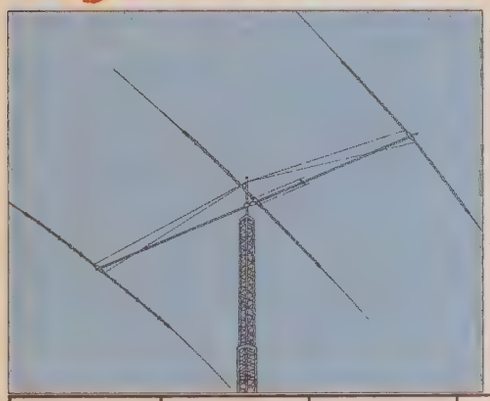
LJ-105CA, $289.95.10 Meters, 5 elements, Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. BN-4000 Balun recommended.
LJ-155CA, $429.95. 15/12 Meters, Five Elements, Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. Includes 12 Meter setting. BN-4000 Balun recommended.
LJ-205CA, $769.95. 20/17 Meters, Five Elements. Exclusive 50 Ohm *BetaMatch*™. Excellent DC Ground. Stainless steel hardware and clamps. BN-4000 Balun recommended. Manual has setting for both bands.
LJ-204BA, $539.95. 20/17 Meters, Four Elements. Exclusive 50 Ohm *BetaMatch*™. The LJ-204BA has a tiltable cast aluminum boom-to-mast clamp, heavy gauge machine-formed element-to-boom brackets and stainless steel hardware and clamps. BN-4000 Balun is recommended. Manual has setting for both bands.
LJ-103BA, $159.95. 10 Meters, Three Elements. Feeds with 50 Ohm coax, comes factory pre-tuned with Hy-Gain's exclusive *BetaMatch*™. BN-86 balun recommended. Includes stainless steel hardware and clamps.
LJ-153BA, $209.95. 15 Meters, 3 elements. Feeds with 50 Ohm coax, *BetaMatch*™, 5.7 dBd gain. BN-4000 Balun recommended. Stainless steel hardware and clamps.
LJ-203BA, $329.95. 20 Meters, Three elements on a 16 foot boom. The LJ-203BA feeds with 50 Ohm coax, factory pre-tuned with Hy-Gain's exclusive *BetaMatch*™.



BN-4000 Balun is recommended. Stainless steel hardware and clamps. Tiltable, cast aluminum boom-to-mast bracket.

Model #	Gain (dBi)	F/B Max	Max Power	Boom Size	element size	turn Radius	Mast diam.	Surface	Wind
LJ-105CA	10.8 dBi	36 dB	1500 W PEP	24 feet	18 feet	15 feet	1.9-2.5 in.	3.9 sq. feet	100 m.p.h.
LJ-155CA	9.8 dBi	25 dB	1500 W PEP	26 feet	25 feet	17 feet, 6 in.	1.9-2.5 in.	5.2 sq. feet	88 m.p.h.
LJ-205CA	8.7 dBi	30 dB	1500 W PEP	34 feet	36 feet	25 feet	1.9-2.5 in.	9.0 sq. feet	99 m.p.h.
LJ-204BA	8.2 dBi	28 dB	1500 W PEP	26 feet	36 feet, 6 in.	22 feet, 6 in.	1.9-2.5 in.	7.3 sq. feet	100 m.p.h.
LJ-103BA	7.9 dBi	24 dB	1500 W PEP	8 feet	18 feet, 7 in.	10 feet, 2 in.	1.625-2.0 in.	2 sq. feet	107 m.p.h.
LJ-153BA	7.9 dBi	25 dB	1500 W PEP	12 feet	24 feet, 11"	14 feet, 3 in.	1.9-2.5 in.	3 sq. feet	80 m.p.h.
LJ-203BA	7.3 dBi	23 dB	1500 W PEP	16 feet, 6 in.	37 feet	20 feet	1.9-2.5 in.	5.4 sq. feet	80 m.p.h.

Hy-Gain Discoverer Series Antennas



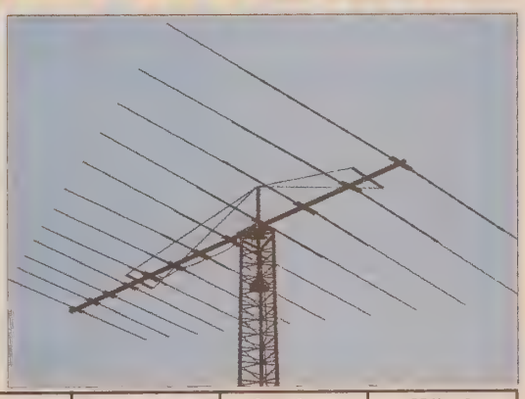
DISCOVERER 71, $289.95.
Covers 30/40 Meters.
This rotatable dipole of low weight and wind surface area so easily fits most existing beam installations. Tuned to either 30 or 40 Meters with a front-to-side ratio of 30 dB for a fast, expansion of band capability. Feeds with 50 Ohm coax. Pre-formed mast clamp.
DISCOVERER 72, $649.95.
Covers 30/40 Meters.
This two-element 40 Meter beam has a unique hairpin loading system. It delivers superior performance. Feeds with 50 Ohm coax and comes factory pre-tuned with Hy-Gain's exclusive *BetaMatch*™. Tiltable boom-to-mast bracket and stainless steel hardware is included. Hy-Gain high power BN-4000 balun is recommended.
DIR-73K, $409.95.
Add-On 30/40 Meter Director Kit
Converts the Discoverer 72 into a three-element beam. Amazingly, it's all on a 35 foot boom, outperforming the other brands that are much larger. Discoverer 72 with director Kit fits on medium duty towers such asHG-52SS, saving both cost and space. HyGain offers wide bandwidth and Hy-Q efficiency without coils. Handle legal power limits.

Model #	Gain (dBi)	F/B Max	Max Power	Boom size	elment size	turn Radius	Mast diam.	Surface	Wind
DIS-71	6.5 dBi	35 dB	1500 W PEP	2.7 feet	45 feet	22.5 feet	1.9-2.5 in.	2.7 sq. feet	100 m.p.h.
DIS-72	6.5 dBi	15 dB	1500 W PEP	22.6 feet	44.8 feet	25 feet	1.9-2.5 in.	6.0 sq. feet	80 m.p.h.
DIR-73K	7.5 dBi	26 dB	1500 W PEP	35 feet	45.7 feet	28.9 feet	1.9-2.5 in.	9.0 sq. feet	80 m.p.h.

Hy-Gain HF Log Periodic Antennas

LP-1009A, $1429.95. LP-1009A for UHF connector. LP-1009AN for "N" connector. Covers *10/12/15/17/20 Meters*
Covers the complete 13-30 MHz HF spectrum under a 2:1 VSWR. Built to commercial specifications, it is used by MARS, monitoring stations, marine and government radio stations around the world and now it's available to Hy-Gain amateur customers. The discerning ham operator will appreciate its performance and ease of use. Just imagine all that spectrum coverage and only one feedline. Exclusive 2KW BN-4000 current type balun included. Use T2X Tailtwister or HDR-300A rotators.

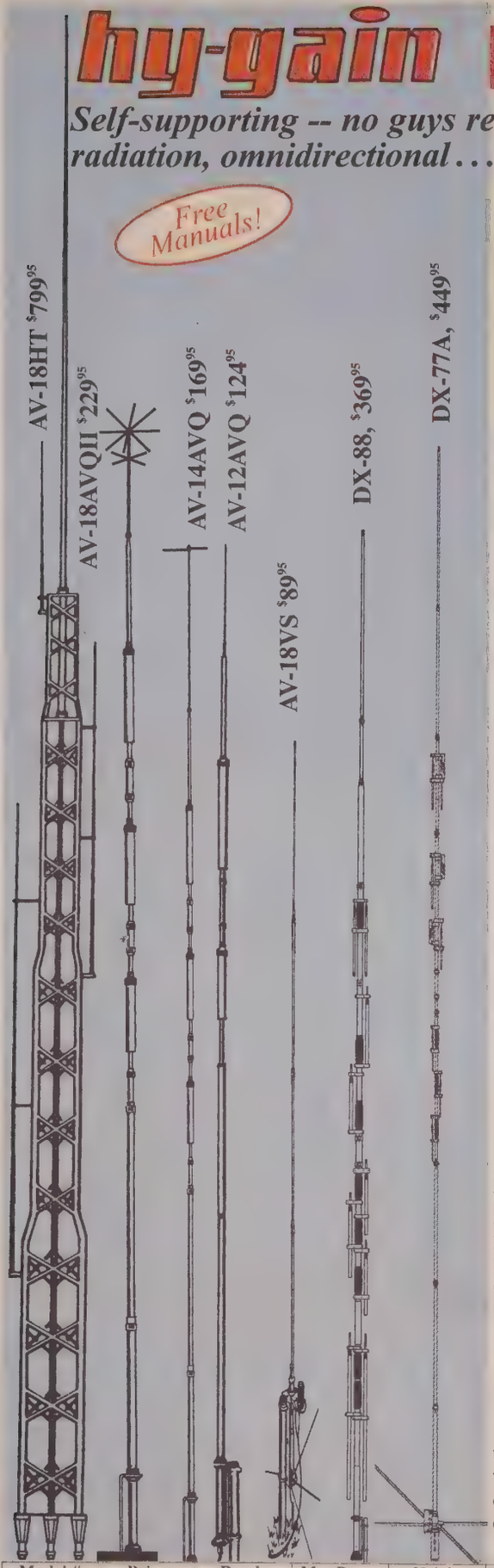
LP-1010A, $1799.95. LP-1010A for UHF connector. LP-1010AN for "N" connector. Covers*10-30 MHz (10, 12, 15, 17, 20, and 30 Meters)*
There are only a few antennas that offer as much HF frequency coverage as the LP-1010A. Like the LP-1009A, this antenna is built to commercial standards using stainless steel hardware and having a wind survivability of 93 mph. Rotatable with use of T2X or HDR-300A rotators.



Model #	Gain (dBi)	F/B Max	Max Power	Boom size	element	turn Radius	Mast diam.	Surface	Wind
LP-1009A/N	7.3 dBi	22 dB	1500 W PEP	27 feet	39 feet	22.5 feet	1.9-2.5 in.	12.5 sq. feet	103 m.p.h.
LP-1010A/N	7.0 dBi	22 dB	1500 W PEP	36 feet	48 feet	28.5	1.9-2.5 in.	16 sq. feet	93 m.p.h.

hy-gain HF VERTICALS

Self-supporting -- no guys required . . . remarkable DX performance -- low angle radiation, omnidirectional . . . 1500 Watts . . . Low SWR . . . 2 year limited warranty



All hy-gain multi-band vertical antennas are entirely self supporting -- no guys required. They offer remarkable DX performance with their extremely low angle of radiation and omnidirectional pattern.

All hy-gain vertical antennas handle 1500 Watts PEP SSB, have low SWR, automatic band-switching (except AV-18VS) and include a 12-inch heavy duty mast support bracket (except AV-18HT). Heavy duty, slotted, tapered swaged, aircraft quality aluminum tubing with full circumference compression clamps is used for radiators. Includes all stainless steel hardware. Recessed SO-239 prevents moisture damage.

Hy-gain verticals go up easily with just hand tools and their cost is surprisingly low. All hy-gain Verticals feature a two year limited warranty.

AV-18HT, $799.95.

10/12/15/20/40/80 M
17 & *160 Meters optional*

Standing 53 feet tall, the famous *Hy-Gain HyTower* is the world's best performing vertical! The AV-18HT features automatic band selection achieved through a unique stub-decoupling system which effectively isolates various sections of the antenna so that an electrical 1/4 wavelength (or odd multiple of a 1/4 wavelength) exists on all bands. Approximately 250 kHz bandwidth at 2:1 VSWR on 80 Meters. With the addition of a base loading coil LC-160Q or MK-160A, it also provides exceptional 160 Meter performance. The 24 foot tower is all rugged, hot-dip galvanized steel and all hardware is iridited for corrosion resistance. Special tilt-over hinged base for easy raising and lowering. 53 feet, 114 lbs. **MK-17, $89.95.** 17M add-on Kit. **LC-160Q, $109.95.** 160 M loading coil. **MK-160A, $119.95.** 160M 1500W kit.

DX-88, $369.95.

10/12/15/17/20/30/40/80M
160 Meters optional.

All bands are *easily* tuned with the DX-88's *exclusive* adjustable capacitors. 80 and 40 Meters can even be tuned from the ground without having to lower the antenna. Super heavy-duty construction. 25 feet, 18 pounds. **DX-88 OPTIONS: KIT-160-88, $189.95.** 160 M add-on kit. **GRK-88, $99.95.** Ground Radial System. **RRK-88, $99.95.** Roof Radial System.

DX-77A, $449.95.

10/12/15/17/20/30/40 M

No ground radials required! Off-center-fed Windom has 55% greater bandwidth than competitive verticals. Heavy-duty tiltable base. Each band independently tunable. 29 feet, 25 pounds.

AV-18AVQII, $229.95.

10/15/20/40/80 Meters

New! **The** classic is back with improved design including three separate air dielectric Hy-Q™ traps for 10 through 80 Meters --1.5 kW PEP. A loading coil and an effective radiator is used for 80 Meters --1kW PEP.

AV-14AVQ, $169.95.

10/15/20/40 Meters

The Hy-Gain AV-14AVQ uses the same trap design as the famous Hy-Gain Thunderbird beams. Three separate air dielectric Hy-Q traps with oversize coils give superb stability and 1/4 wave resonance on all bands. 18 feet, 9 pounds.

New! **MK-80, $79.95.** 80 Meter add-on kit for AV-14AVQ. Easy to install. Includes pre-wound loading coil, hardware.

AV-18VS, $89.95.

10/12/15/17/20/30/40/80 M

High quality construction and low cost make the AV-18VS an exceptional value. Easily tuned to any band by adjusting feed point at the base loading coil. Roof mount with Hy-Gain AV-14RMQ kit, $89.95. 18 feet, 4 pounds.

AV-12AVQ, $124.95.

10, 15, 20 Meters

The AV-12AVQ also uses Thunderbird beam design air dielectric traps for extremely Hy-Q performance. This is the way to go for inexpensive tri-band performance in limited space. 13 ft., 9 lbs. Roof mount with AV-14RMQ kit, $89.95.

AV-14RMQ, $89.95

Roof Mounting Kit

The AV-14RMQ roof mounting kit provides rugged support for Hy-gain models AV-18VS, AV-14AVQ and AV-12AVQ. Kit includes base plate, mast, radial/guy wires and mounting hardware.

Model #	Price	Bands	Max Power	Height	Weight	Wind Surv.	Rec. Mast
AV-18HT	$799.95	10,15,20,40,80	1500 W PEP	53 feet	114 pounds	75 MPH	------
AV-14AVQ	**$169.95**	**10,15,20,40**	**1500 W PEP**	**18 feet**	**9 pounds**	80 MPH	**1.5-1.625"**
AV-12AVQ	$124.95	10/15/20 M	1500 W PEP	13 feet	9 pounds	**80 MPH**	1.5-1.625"
AV-18VS	**$89.95**	**10 - 80 M**	**1500 W PEP**	**18 feet**	**4 pounds**	**80 MPH**	**1.5-1.625"**
DX-88	$369.95	10 - 80 M	1500 W PEP	25 feet	18 pounds	75 mph no guy	1.5-1.625"
DX-77A	**$449.95**	**10 - 40 M**	**1500 W PEP**	**29 feet**	**25 pounds**	**60 mph no guy**	**1.5-1.625"**
AV-18AVQII	$229.95	10,15,20,40,80	1500WPEP	18 feet	12 pounds	70 mph guy	1.5-1.625"

hy-gain
Antennas, Rotators & Towers
308 Industrial Park Road, Starkville, MS 39759 USA
Toll-free Customer Sales Hotline: 800-973-6572
• **TECH:** 662-323-9538 • **FAX:** 662-323-6551
http://www.hy-gain.com

Prices and specifications subject to change without notice or obligation ™ Hy-Gain®, 2004

Hy-Gain(R) Multi-Band PATRIOT Vertical Antennas

8-band vertical covers 40/30/20/17/15/12/10/6 Meters

• No radials • No traps • No ground • No tuning • Handles 1500 Watts

hy-gain's new *PATRIOT* HF verticals are the best built, best performing and best priced multiband verticals available today.

Make full use of your sunspot cycle with the *PATRIOT's low angle* signal.

AV-640, $389.95, uses quarter wave stubs on 6, 10, 12 and 17 meters and efficient end loading coil and capacity hats on 15, 20, 30 and 40 meters.

*hy-gain*R AV-640
8 Bands: 40, 30, 20, 17, 15, 12, 10, 6 M
$389.95
Suggested Retail
Call your dealer for your best price!

Instead of typical traps, the AV-640 resonators are placed in parallel not in series.

End loading of the lower HF bands allows efficient operation with a manageable antenna height.

No ground or radials needed -- Effective counterpoise replaces radials, end fed with broadband matching unit.

Automatic bandswitching -- Single coax cable feed, each band is individually tunable, wide VSWR bandwidth.

Sleek and low-profile -- Low wind surface area, small area required for mounting, mounts easily on decks, roofs and patios.

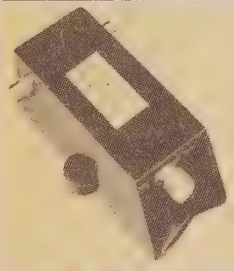
Built-to-last -- High wind survival, matching unit made from all *Teflon*R insulated wire. **Hy-gainR warranty --** Two year limited warranty, all replacement parts in stock.

AV-620, $289.95. Covers all bands 6 through 20 Meters with no traps, no coils, no radials yielding an uncompromised signal across all bands.

AV-620/640 Matching Network

*hy-gain*R AV-620
6 bands: 20, 17, 15, 12, 10, 6 M
$289.95
Suggested Retail

Model #	Bands	Max Pwr	Height	Weight	wind surv
AV-620	6B, 6-20	1500W	22.5 feet	10.5 lbs.	80 MPH
AV-640	8B, 6-40	1500W	25.5 feet	17.5 lbs.	80 MPH

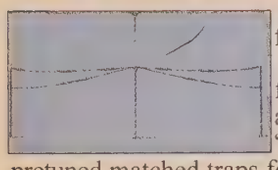


FAMOUS Heavy Duty HY-GAIN BALUNS

BN-86, $79.95. Broadband 50 Ohm ferrite balun. Useable from 3 to 30 MHz. Rec-ommended for all HF Yagi antennas. It provides improved front-to-back ratio. Comes w/clamp to bolt to boom, SO-239 connector.

BN-4000B, $109.95. Broadband 50 Ohm Beam current balun is potted to seal out moisture. Rated at 4000 Watts for increased power handling capabilities. Range is 1 MHz to 54 MHz. SO-239 connector. **BN-4000D, $109.95.** dipoles. **BN-4000N, $119.95.** "N" connector.

HF Multiband *Hy-Q* trap DOUBLETS



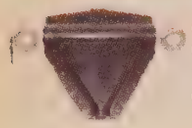
DP-2BDQ, $139.95. 40/80 Meters, 101 feet maximum length of dipole.

DP-5BDQ, $259.95. 10-80 Meters, 94 ft. max length. DP-2BDQ and DP-5BDQ are designed for horizontal or inverted "V" rated at legal power. Each individually pretuned matched traps for each band. 50-Ohm feed, cable not incl.

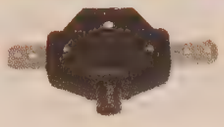
ADJUSTABLE HF DIPOLE ANTENNA

DP-19PD, $279.95. 1.8-30 MHz, 160-10 Meters. Great for field day or anytime. Braided nylon wire rope with conductors woven in. *Pre-marked* frequencies for easy installation. 100 ft. support rope on each end and SO-239 (UHF) connector is on center insulator.

HY-GAIN INSULATORS FOR MULTIBAND DIPOLE ANTENNA



C-1, $29.95. Center Insulator for multiband dipole antenna.

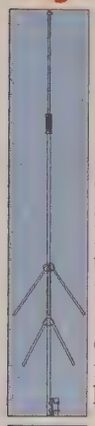


C-1C, $29.95. Similar to C-1, but has SO-239 antenna connector.

E-1, $6.95. End Insulator for Multi-band doublet antenna. Set of 2.

CONTESTER HEADSET CLOSEOUT SALE!
Famous Hy-gain headset/boom mic. Regular price: $179.00.
HS-2400
$99.95
Ship Code A

Hy-Gain VHF Vertical Antennas



V-2R
$109.95
Covers 138-175 MHz

2 Meter vertical with 5.2 dBi gain derived from the famous extended double zepp antenna design. Radiating elements are two collinear 5/8 waves fed in phase. 2 sets of 1/4 wave radials properly decouple lower radiator from the mast. SO-239, handles 500 Watts. 9 ft.

V-4R
$109.95
Covers 400-475 MHz

V-3R
$119.95
Covers 216-225 MHz

UHF vertical with 5.2 dBi gain derived from double zepp antenna design. Type N, handles 500 Watts, 4 foot.

1 1/4 Meter vertical w/5.2 dBi gain, double zepp design. SO-239, handles 500 Watts. 6ft., 9 in.

V-42R
$169.95
Covers 143-153, and 436-455 MHz

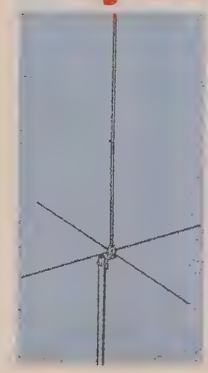
V-42R is independently tunable at 144 and 440 MHz. Fed through one coax cable, it has sets of 1/4 wave radials which properly decouple 5/8 wave radiators from the mast. Gives 5 dBd gain UHF and 3 dBd gain on VHF. Type N, handles 200 Watts. 9 ft.

V-6R
$204.95
Covers 51-54 MHz

V-6R antenna is based on 2 collinear 5/8 wave radiators. 500 Watt enclosed coil and 2 sets of 1/4 wave radials provide complete mast decoupling and optimum pattern and gain. Rugged design for severe weather, also DC ground lightning protector. 25 ft., 3 in., UHF female connect, handles 500 Watts.

Model#	Frequenc	Gain dBi	Pwr Input	Wind	Max Mast	Height	Weight
V-2R	138-175	5.2 dBi	500 Watts	105 mph	2 in. OD	9 foot	6 pounds
V-42R	143-153, 436-455	7.2 UHF 5.2 VHF	200 Watts continuous	100 mph	2 in. OD	9 foot	6 pounds
V-4R	400-475	5.2 dBi	500 Watts	230 mph	2 in. OD	4 foot	4 pounds
V-3R	216-225	5.2 dBi	500 Watts	100 mph	2 in. OD	6 ft. 9 in.	5 pounds
V-6R	51-54	5.2 dBi	500 Watts	80 mph	1.5-2.25	25 ft. 3 in.	15 pounds

Hy-Gain VHF Ground Planes



GPG-2B
$49.95
Covers 142-185 MHz

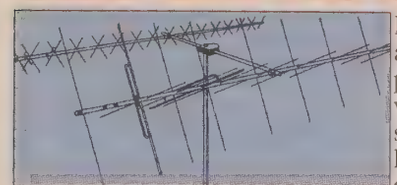
GPG-2B is a 5/8 Wavelength Ground Plane for two meters is omni-directional and tunable from 142-185 MHz. It delivers an omni-directional gain of 3.2 dBi. Handles 100 Watts. Measures 4 feet, max mast mount accepted is 1.625 in O.D. Wind area is .30 sq. ft.

GPG-1B
$39.95
Covers 144-148 MHz

GPG-1B is a 1/4 Wavelength ground plane similar to the GPG-2B. It has unity gain, covers 144-148 MHz.

GPG-1, $39.95, is similar to GPG-1B, but covers162-174 MHz.

Oscar Link 435 MHz • 145.9 MHz



VB-216SAT
$229.95
Covers 144-148 MHz

UB-7030SAT
$229.95
Covers 432-438 MHz

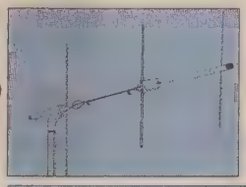
FB-217SAT
$119.95
Crossboom Assembly only

Hy-Gain's *Oscar Link* antennas are complete with the necessary phasing lines, relays and hardware. Left and right circularity switching reduces fading. True RF switching elements are rated at 200 Watts and improved VSWR for higher efficiency. Feed points are encapsulated, weather protected for long life. The fiberglass crossboom maintains the integrity of the circularity pattern. **DB-218SAT, $559.95**. The complete 2 Meter/ 440 MHz *Oscar Link* antenna system with crossboom assembly with necessary phasing lines, relays and hardware.

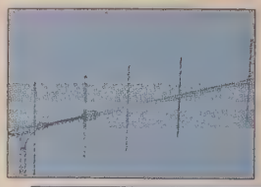
Model#	F/B ratio	Gain dBi	Pwr Input	# Element	Boom	Wind	Weight
VB-216SAT	25 dB	13.7 dBi	200 W PEP	16	168.75 in.	1.1 sq. ft.	7 lbs.
VB-7030SAT	25 dB	16.2 dBi	200 W PEP	30	134 inches	.7 sq. ft.	4 lbs.

VHF-FM Beam Antennas

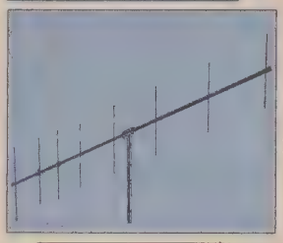
These 2 Meter FM beam antennas include Hy-Gain's exclusive *Beta Match*™ to provide exceptional Front-to-Back ratio and maximum obtainable gains. The VB-23FM (8.3 dBi gain), VB-25FM (11.2 dBi gain), VB-28FM (14 dBi gain), and the VB-214FM (15.2 dBi gain) gives you a wide choice of 2 Meter Beam performance from which to choose. Accepts up to 2 inch mast.



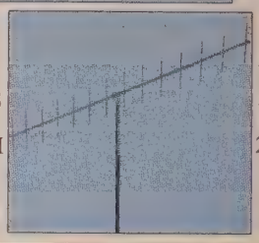
VB-23FM
$49.95
2 Meter FM Beam



VB-25FM
$59.95
2 Meter FM Beam



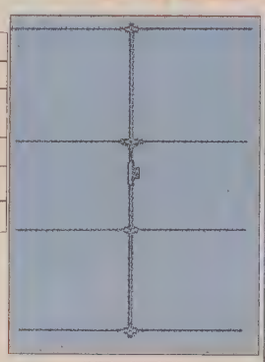
VB-28FM
$79.95
2 Meter FM Beam



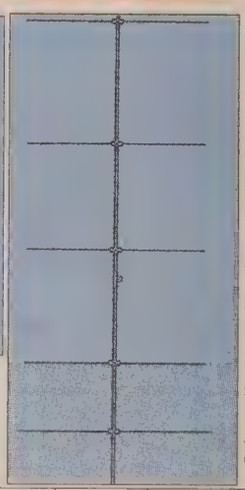
VB-214FM
$89.95
2 Meter FM Beam

Model#	F/B MAX	Gain dBi	Pwr Input	Long el	Boom	Mast dia.	Weight
VB-23FM	20 dB	8.3 dBi	500 Watts	40.25 in.	43.5 in.	2.0 in	2 pounds
VB-25FM	20 dB	11.2 dBi	500 Watts	39.625 in.	75 in.	2.0 in	3 pounds
VB-28FM	20 dB	14 dBi	500 Watts	40.25 in.	148.75 in.	2.0 in	4 pounds
VB-214FM	20 dB	15.2 dBi	500 Watts	39.5 in.	15 ft. 6 in.	2.0 in	6 pounds

6-Meter DX Beam Antennas



VB-64DX
$144.95
Covers 50-54 MHz

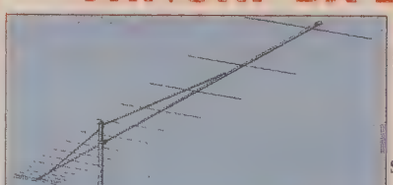


VB-66DX
$264.95
Covers 50-54 MHz

The VB-64DX and VB-66DX feature a concept in beam construction that provides actual delivered performance equalling maximum theoretical gain. The 4-element VB-64DX generates an impressive 10.4 dBi gain and the 6-element VB-66DX increases the gain to an unprecedented 12.5 dBi.

Model#	Frequenc	Gain dBi	Pwr Input	wind area	#Element	Boom	Weight
UB-7031DX	420-438	19.8 dBi	2 kW PEP	1.9 sq. ft.	31	24.06 ft.	9.25 lbs.
VB-215DX	144-146	16.4 dBi	2 kW PEP	2.75 sq. ft.	15	27.88 ft.	13.56 lbs.
VB-64DX	50-54	10.4 dBi	500 Watts	1.1 sq. ft.	4	12 ft.	10 lbs.
VB-66DX	50-54	12.5 dBi	1.5kWPEP	1.8 sq. ft.	6	24.575 ft.	17 lbs.

VHF/UHF DX Beam Antennas



UB-7031DX
$219.95
Covers 420-438 MHz

VB-215DX
$229.95
Covers 144-146 MHz

Hy-Gain's DX-Series VHF/UHF Beams are based on the DL6WU element length and spacing and were further refined on Hy-Gain's antenna test range and by computer modeling. Both beams feature encapsulated weatherproof feedpoints with type N connectors for excellent VSWR and power handling. High quality mechanical construction is assured by heavy wall booms and boom supports made of 6063-T832 aluminum tubing, stainless steel hardware, UV stabilized thick-shoulder element insulators and PTFE coaxial baluns.

MIRAGE . . . 160 Watts on 2 Meters!

MIRAGE'S *Most Popular* amplifier gives you 160 Watts of output power for just 25W in from your base/mobile rig!

B-2518-G
$329
Suggested Retail

The B-2518-G is ideal for your 20-60 Watt 2 Meter mobile or base station. You'll talk further, longer, clearer on all modes --FM, SSB, CW -- hear weak signals better than you've ever before! You get low noise 20 dB GaAsFET pre-amp with an excellent 0.6 dB noise figure for pulling out weak signals.

B-2518-G is *fully protected* with features found in expensive commercial amplifiers. High SWR or excessive input power can damage your amplifier. Protection circuits automatically bypass your amplifier to prevent damage and LED lights to warn you.

Active-Bias™ System gives crisp, clear voice in SSB mode!

An *Active-Bias™ System* keeps SSB voice crisp and clear for fantastic operation.

Other amplifiers using conventional bias methods tend to produce splatter and distortion as power level changes. This amp with *Active-Bias™* doesn't exhibit the problem.

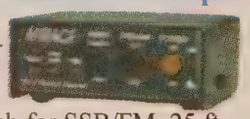
The B-2518-G knows when you are transmitting and kicks in 160 Watts of power. Adjustable time delay give you smooth transmit/receive switching. Remote external keying. *You can remotely control your B-2518-G and place it out of the way. An* ***RC-2, $45, Remote Control*** *turns Power On/Off and select SSB/FM.* Extra heavy duty custom heatsink spans the entire cabinet. Draws 16-20A from 13.8 VDC. Compact 12x3x5.5 inches.

More 160 Watt 2 Meter Amps

B-5018-G, $329. Like B-2518-G, but for 10-50 Watt mobile/base. 160 Watts out for 50 W in.

B-1018-G, $409. MIRAGE'S most popular *dual purpose* HT or mobile/base 2 Meter amp. Get 160 Watts out for 10 W in. For 0.2 to 15 Watt rigs Use RC-2, $45, Remote Control.

Remote Control Head for Amps



RC-1/RC-2, $45.00. Remote controls most MIRAGE amps. Power On/Off, preamp On/Off, switch for SSB/FM. 25 ft. cable (longer available with special order). 1 3/4x 3 3/4x2 1/2". 5018/2518/1018 use RC-2. Others use RC-1, call mirage to verify.

Power Curve -- Typical Output Power in Watts												Amps
B-1018-G	25	50	140	150	160	160	--	--	--	--	--	**19**
B-2518-G	5	7	40	60	80	100	125	160	160	160	--	**16**
B-5018-G	--	2	15	25	40	50	70	100	130	160	160	**16**
Watts In	0.25	0.5	3	5	8	10	15	20	25	35	50	--

Mirage 150 Watts *6-Meter* Amplifier

FCC Type Accepted

The ***A-1015-G*** *is ideal for your 1-15 Watt Mobile or Base Station Rig.*

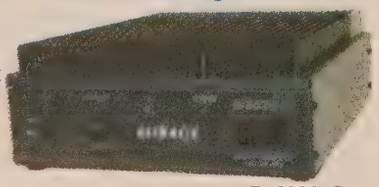
A-1015-G
$389
Suggested Retail

A built-in low noise GaAsFET receive preamp gives you 20 dB gain -- lets you dig out weak signals and score exotic DX on sporadic E!

You'll talk further, longer, and clearer on all modes -- FM, SSB, CW. Hear weak signals better than ever before! Extra heavy-duty heatsink spans entire length of cabinet. Draws 18-22 amps at 13.8VDC. Just 5 pounds, measures 12Dx3Hx5 1/2W inches.

Power Curve -- Typical A-1015-G Output Power in Watts.									
Watts Out	**6**	**22**	**42**	**63**	**84**	**98**	**122**	**142**	**150**
Watts In	.25	1	2	3	4	5	7	9	10

Mirage 2-Meter 300 Watt Amplifiers



Get 300 Watts of brute power for 50 Watts input on all modes -- FM/SSB/CW. Ideal for 20-60 watt 2-Meter mobile or base rigs. Hear weak signals -- low noise GaAsFET preamp gives excellent 0.6 dB noise figure. Select 15/20 dB gain. Heavy heatsink spans entire length of cabinet -- prevents overheating. Power transistors are protected by our *Therm-O-Guard™*. Fully protected from high SWR and excessive input power. Has warning LED, smooth adjustable transmit/receive switching with remote external keying. Draws 48A@13.8 VDC. 12x12x5". **RC-1,** Remote Control Head, **$45.00.**

B-5030-G
$739
Suggested Retail

Power Curve -- Typical Output Power in Watts							
B-5030-G	$739	--	--	55	150	220	300
B-2530-G	$759	30	95	140	250	300	--
B-1030-G	$739	80	225	270	300	--	--
Watts In		1	3	5	10	25	50

223-225 MHz Amplifiers

Choose from 10 different models -- 20 to 220 Watts out for 2 to 50 Watts in, $129 to $655. Extra heavy duty heatsink spans the entire length of cabinet. Protection circuits automatically bypass your amplifier to prevent damage and an LED lights to warn you. Your expensive power transistors are protected from overheating by Mirage's exclusive *Therm-O-Guard™*. Automatically shuts down and bypasses your amp if needed. All Mirage C-Series have a 20 dB GaAsFET preamp.

Model #	Price	Input	Output	Current
C-22-G	$169.00	.1-5 W	3-36 W	5 amps
C-211-G	$369.00	.3-5 W	50-126W	25 amps
C-106-G	$269.00	.3-15 W	3-60 W	12 amps
C-1012-G	$369.00	.3-15 W	6-120 W	20 amps
C-2512-G	$345.00	.3-40 W	.5-120 W	18 amps
C-5012-G	$365.00	.35-55 W	3-120 W	18 amps
C-1022-G	$759.00	.25-10 W	40-220W	48 amps
C-2522-G	$759.00	.25-30 W	1.5-220w	48 amps
C-5022-G	$739.00	.35-55 W	5-220 W	48 amps

420-450 MHz Amplifiers

All UHF models feature all modes: FM, SSB, CW, adjustable delay for SSB and remote control outlet. They also have a heavy duty heatsink that spans entire length of cabinet, 50 Ohm impedance input and output, 13.8 VDC voltage. **D-3010-N** -- 100 W out/30W in. For 5 to 45 Watt mobile/base. **D-1010-N** -- 100 Watt/10W in. For handhelds or mobile/base. **D-26-N** -- 60 W out/2W in, for HTs.

Amateur TV Amps

Industry standard ATV amps available.
D-1010-ATVN, $414. 82 Watts PEP out /10W in.
D-100-ATVN, $414. 82 Watts PEP out/2W in.

MIRAGE D-Series Specifications				
Model #	**Price**	**Input**	**Output**	**Current**
D-15-N	$189.00	.25-2 W	3-18 W	3 amps
D-26-N	$289.00	.4-5 W	17-60 W	12 amps
D-100ATVN	$419.00	0.5-5 W	15-52 W	20 amps
D-1010-N	$395.00	.30-15 W	5-110 W	20 amps
D-1010ATVN	$439.00	.1-15 W	5-100 W	20 amps
D-3010-N	$389.00	5-45 W	7-100 W	20 amps

Commercial Grade Amplifiers

PAC-30-130B
$329
Suggested Retail

Commercial Amplifiers are available for 150-174, 450-470 MHz and VHF marine bands, 70-100 Watts out. Most feature over-temperature sensing that bypasses amplifier when safe operating temperatures are exceeded; heavy duty heatsinks finned on 3 sides; and wide input power range. These amps were designed for two-way radio signal commercial, mobile, or fixed location use. All are FCC type accepted.

MIRAGE Commercial Amplifier Specifications					
Model	**Price**	**Input**	**Output**	**Preamp**	**Range**
B34GC	$159.00	.5-3 W	10-30 W	Yes	150-162
Pac1070B	$299.00	10-30 W	5-70 W	No	150-174
Pac15100C	$429.00	5-25 W	5-100 W	No	450-475
Pac30130B	$329.00	10-30 W	1-100W	No	150-174
M120G	$199.00	.1-3 W	10-25 W	Yes	156-158.5

Mirage 2-Meter/440 MHz Amplifiers for HTs!

Mirage BD-35 Handheld *Dual Band Amplifier*

BD-35
$159.95
Suggested Retail

- **35 Watts Output**
- All modes: FM, SSB, CW
- **Reverse Polarity Protection**
- Free Mobile Bracket
- **Works with all HTs up to 8 Watts**
- Auto RF sense T/R switch

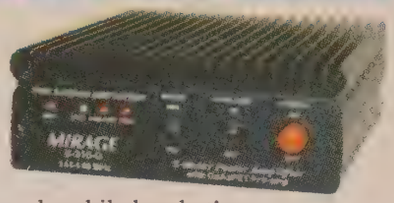
Add this MIRAGE BD-35 dual band amp and boost your handheld to a much more powerful mobile or base -- 45 Watts on 2 Meters or 35 Watts on 440 MHz! Get 35 Watts out with just 4 Watts in!

MIRAGE's exclusive *FullDuplex Amp*™ lets you talk on a band and listen on another band at the same time -- just like a phone conversation (requires compatible HT).

Features auto band selection, reverse polarity protection, on-air leds, single connector for dual band radios/antennas, free mobile bracket and more! **Works** with HTs to 7 Watts. Super compact 5Wx1½Hx5D inches. Draws 7 Amps at 13.8 VDC.

Mirage B-310-G . . . 100 Watts on 2 Meters

B-310-G
$199
Suggested Retail



Reach distant repeaters . . . Log onto faraway packet bulletin boards.

This rugged Mirage B-310-G amplifier operates all modes: FM, SSB and CW. Perfect for all HTs up to 8 Watts and multi-mode SSB/CW/FM 2 Meter rigs.

Built-in low noise GaAsFET receive preamp gives you 15 dB gain -- lets you dig out weak signals. SWR and Reverse Polarity Protection.

Mirage's integrated *HeatsinkCabinet*™ and whisper quiet fan gets heat out fast!

The results? An ultra-compact 4¾x1¾x7¾ inch 2½ pound amplifier that delivers a super powerful 100 Watts.

Free 3 foot handheld to B-310-G coax cable and mobile bracket!

Automatic RF sense Transmit/Receive switch. Remote keying jack. LEDs monitor "On-Air", high SWR, pre-amp, power. Push buttons select SSB/FM, pre-amp, power. Draws 15 Amps at 12-15 VDC.

Full one year MIRAGE warranty

With MIRAGE's legendary ruggedness, you may never need our superb warranty.

200 Watts on 2 Meters

B-320-G
$449.95
Suggested Retail

Add this amp to your 2 Meter HT or mobile radio and get 200 Watts brutal output.

Talk further, longer, clearer!

Has 15 dB GaAsFET preamp, works all modes FM/SSB/ CW. Fully protected by high SWR protection. Includes mobile mounting bracket.

An input level switch selects proper input power from your HT or mobile radio.

Low power input for handheld radios, 250 mW to 10 Watts. .25 Watts in gives 132 Watts output. 3 Watts input from your HT gives full power output.

High power input for mobile radios, 10 Watts to 50 Watts. 10 Watts input gives 95 Watts output. 50 Watts input gives full power output.

Custom wrap-around heatsink gives excellent heat dissipation as well as an attractive appearance.

MIRAGE 2-Meter/440 MHz Amplifiers for HTs

B-34-G
$99.95
Suggested Retail

B-34
$79.95
Suggested Retail

Add this MIRAGE amp to your 2 Meter handheld and get 35 Watts output . . . talk further, longer, clearer . . . *It's the best HT amplifier $99.95 can buy!* **Here's why:**

First-class strip-line techniques and modular construction gives superb RF performance and unsurpassed reliablity.

Custom wrap around heatsink provides excellent heat distribution -- runs cool for extra long life. Reverse polarity protection can save your amp and your pride if you connect power backward.

Automatic RF sense transmit/ receive switch makes operation super easy. Low input SWR keeps your handheld safe from overheating. Individual pushbutton switches lets you select FM/SSB operation, receive preamp on/off and power on/off.

LEDs show On-Air, receive preamp on and power on. 5¼x1¾x4¾". Free mobile mount bracket, hardware. **B-34, $79.95.** Like B-34-G but FM only, less preamp, mobile bracket. Super tiny 3⅛x1¾x4¼ in.

HT Docking Booster

B-24-G
$114.95
Suggested Retail

Two Meter docking booster gives 50 Watts out with just 8 Watts in!

18 dB GaAsFET preamp, on/off switch, On-air, preamp and Xmit LEDs. 3¼x3¼x4¼ in. Requires 13.8 VDC. Auto band selection, Reverse Polarity protection and much more.

Choose an adapter to fit your handheld

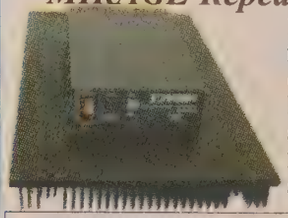
Adapter	Manufacturer/Handheld Type
#MI-2	IC-2S/2SAT/2SR/3S/3SAT/3SR/24/W2/X2
MI-3	ICOM W21/X21/W21T/X21T, etc.
MY-1	YAESU FT-23/204/73/704/104/728, etc.
MY-2	YAESU FT-24/74/205/705/305/805/729, etc.
MK-1	TH-25/25G/45/45G/55/75/77, etc.
MK-2	TH-22A/22AT/42A/42AT/59/79/79E, etc.

Low Noise GaAsFET preamps

High gain ultra low noise GaAsFET preamps for receiving weak signals. Selectable gain prevents receiver intermod. 15-22 dB gain. Less than 0.8 dB noise figure, auto RF switching to 160W. Choose In-shack or Mast-Mount models below.

Frequency (MHz)	*In Shack $139*	*Mast Mount $195*
28-30	KP-1/10M	KP-2/10M
50-54	KP-1/6M	KP-2/6M
144-148	KP-1/2M	KP-2/2M
220-225	KP-1/220	KP-2/220
430-450	KP-1/440	KP-2/440

MIRAGE Repeater Amplifiers



11 models to choose from -- continuous duty all mode FM/SSB/CW repeater amplifiers for 6, 2, 220 MHz, 450 MHz, and ATV service.

MIRAGE Repeater Amp Specifications

Model#	Price	Input	Max Out	MHz
A-1015-R	$579.00	.25-5 W	98 W	50-52
B-1016-R	$629.00	.25-3 W	130 W	145-148
B-2516-R	$579.00	.5-10 W	111 W	145-148
C-211-R	$659.00	.25-.5 W	80 W	223-225
C-1012-R	$659.00	.25-6 W	96 W	223-225
C-2512-R	$625.00	.05-15 W	90 W	223-225
D-1010-NR	$689.00	.25-4 W	80 W	440-450
D-3010-NR	$659.00	1-15 W	75 W	440-450
D-100-ATVN-R	$689.00	.25-1 W	52 W	420-450
D-1010-ATVN-R	$689.00	.25-4 W	80 W	420-450

Accurate SWR/Wattmeters

Read SWR directly and forward, Reverse, Peak/Average power. Remote coupler. 1.8-30, 50-200, 420-450, 1260-1300 MHz models.

MODEL	PRICE	FREQ	SWR sens	Power
MP-1	$235.00	1.8-30 MHz	1-2 Watts	2000 W
MP-2	$235.00	50-200	1-2 Watts	1500W
MP-3	$265.00	420-450	5 Watts	150 W
MP-4	$279.00	1260-1300	1 Watt	1/10/100

Nearest Dealer/Free Catalog: 800-647-1800

Technical: 662-323-8287 **Fax:** 662-323-6551

MIRAGE COMMUNICATIONS EQUIPMENT

300 Ind'l Park Road, Starkville, MS 39759

www.mirageamp.com

Vectronics 2 kW *Roller Inductor* Antenna Tuner

HFT-1500
$459.95
Ship Code D

The Vectronics HFT-1500 Roller Inductor Tuner has three continuously variable components -- two 4.5 kV capacitors and a roller inductor controlled by a precision crafted crank handle and a gear driven 5-digit counter.

The HFT-1500 will tune ANY real antenna . . . verticals, dipoles, inverted vees, beams, long wires, SWL antennas . . . ANYTHING! And its huge components make the tuning ARC-FREE!

You can tune your SWR down to the absolute minimum from 1.8 to 30 MHz, including MARS and the WARC bands. Handles 2 kW SSB PEP amplifier input power.

The bargraph is a 21 segment display that makes analyzing SSB power amazingly easy. This LED meter shows your peak reading and has fully adjustable level and delay controls.

A lighted dual movement *D'Arsonval* Cross-Needle SWR/Wattmeter displays SWR, forward and reflected power simultaneously at a glance. RF directional coupler is fully shielded for even greater accuracy.

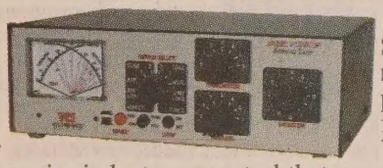
The meter measures peak and average power in the 300/3000 Watt scales. Bargraph display and meter lamp require 12 VDC adapter, included.

The antenna selector switch is a six position ceramic. Coax 1 is for tuned and tuner byass; Coax 2 is for tuned and tuner bypass, bypass and balanced antenna.

The HFT-1500 measures 5.5Hx12W x12.5D inches and is housed in a beautiful RF-tight aluminum cabinet. Weighs 10 lbs.

VC-300DLP . . . World's most versatile HF Antenna Tuner

VC-300DLP
$159.95
Ship Code B



Get everything you've ever wanted . . . precise inductance control that rivals roller inductors, the ability to match any real ant-enna, full 1.8-30 MHz coverage, peak reading backlit Cross-Needle Meter, 8 pos. antenna switch, built-in 50 Ohm dummy load, finest components and world class quality.

VECTRONICS' exclusive *Multi48™* inductor gives you forty-eight inductance values -- you'll get precision tuning that rivals the most expensive roller inductors.

Tune *any* real antenna 1.8-30 MHz, including all MARS/WARC bands. Verticals, dipoles, yagis, quads, long-wires, G5RVs . . .

Has 4:1 balun for balanced line antennas. Handles up to 300 Watts SSB PEP, 200W continuous (150W, 1.8 MHz).

A backlit Cross-Needle Meter displays SWR, forward and reflected power simultaneously. Reads both peak and average power on 30/300 Watt scales. Lamp has front panel switch and uses 12 VDC or 110 VAC with AC-12 $12.95.

An 8-position antenna switch selects 2 coax fed antennas, random wire/balanced line or built-in dummy load for use through your tuner or direct to your transceiver. Bypass position keeps SWR meter in line.

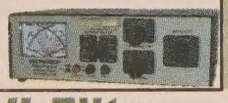
Use the built-in dummy load for testing and repairing your rig, setting power level, adjusting your mic gain and more.

Chemically treated aluminum case has durable baked-on paint and scratch-proof color Lexan front panel. 10Wx9.5Dx3.5H".

300 Watt Antenna Tuner

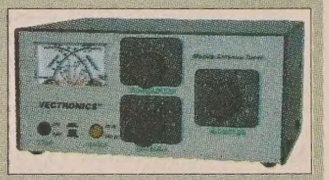
with 21 Segment SSB Bargraph

VC-300D, $199.95. Similar to VC-300DLP, but has deluxe 21 segment SSB bargraph feature.



Vectronics 300 Watt Mobile Tuner

VC-300M
$109.95
Ship Code B



The VC-300M Mobile Antenna Tuner is compact, lightweight, easy-to-operate and is our most economical tuner.

It's compatible with any mobile antenna and any mobile HF transceiver and is compact enough to fit the most compact car. It can also be used at home with dipoles, vees, verticals, beams or quads fed by coax.

Backlit dual movement meter simultaneously monitors power and SWR. Covers 18 to 30 MHz. Handles 300 Watts SSB PEP, 200 Watts continuous, (150 Watts on 1.8 MHz). Measures 7.25x8.75x3.6 inches. Weighs just 3.4 pounds.

Dry Dummy Loads

1500 Watt dry Dummy Load

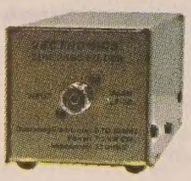
DL-650M, $74.95. Handles 100 Watts continuous, 1500 Watts for 10 seconds to 650 MHz. Ceramic resistor. SWR< 1.3. SO-239.
DL-650MN, $79.95 has N connector.

DL-300M, $44.95. 300 Watt dry dummy load.
DL-300MN, $49.95 with N connector.

DL-2500, $199.95. 2500 Watts dry dummy load is fan cooled. DC to 150 MHz.
DL-2500N, $199.95 with N connector.

Low Pass TVI Filters

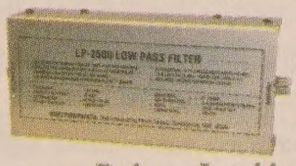
1500 Watts Low Pass TVI Filter



LP-30, $69.95. Eliminates TVI by attenuating harmonics at the source.

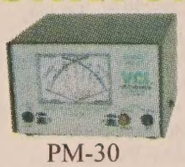
Plugs between transmitter and antenna or tuner. Features nine pole Chebyshev design. Insertion loss is only 0.25 dB at 30 MHz. 52 Ohm impedance. Handles 1500 Watts.

2500 Watts Low Pass TVI Filter



LP-2500, $139.95. Handles up to 2500 Watts key down. SO-239 connectors.

SWR/Power Meters



PM-30

PM-30UV

PM-30, $79.95, for 1.8 to 60 MHz. Displays forward and reflected power and SWR simultaneously on dual movement Cross-Needle Meter.

True shielded directional coupler assures accuracy. Backlit meter displays peak or average power in 300/ 3000W ranges. 5.3x5.75x3.5 inches. SO-239 connectors.

PM-30UV, $89.95. Covers 144/220/440 MHz. 30/300 Watt ranges. SO-239.
PM-30UVN, $89.95. Type N.
PM-30UVB, $89.95. BNC connector.

Tuned Active SWL Antenna

AT-100, $79.95. This portable compact antenna is perfect for indoor use by itself or with an external antenna. Tunes from 300 KHz to 30 MHz including VLF, AM broadcast, all shortwave and ham radio bands. Great for SWL!

Deluxe Iambic CW Keyer

CK-200, $79.95. Speed, weight, tone, volume controls, tune, iambic A/B switch for 3 types of keying output, speed control 6-50 wpm, self-complete dots/dashes. Use 9V battery/110 VAC.

KP-200, $69.95. Iambic Key Paddles complete with 1/4" plug and cable. KP-200, chrome base or KP-200B, black base.

High Pass TVI Filters

HPF-2, $29.95. Installs between VCR and TV and cable TV or antenna lead-in cable. Eliminates or reduces interference caused by nearby HF transmitters. 6 meter notch. Has type "F" connectors.

HPF-1, $24.95. Same as HPF-2, no six meter notch. Low loss in TV passband 52-550 MHz.

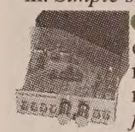
Vectronics high-performance electronic kits . . . fun to build and use!

Comprehensive Soldering Course Kit. Designed for schools and individuals. Includes theory, quizzes, PC board and components for soldering practice. Used & endorsed by universities, vo-techs, businesses and others. **Order VEC-1500K, $29.95.**

Blinking Tower LED Electronic Badge Kit. *Be proud of who you are!* Listed in the boy scout badge handbook, this is a great evening project for your boy scout troop and a great way to introduce them to ham radio and basic electronics. **Order VEC-5100K, $12.95.**

Crystal radio set Kit lets you relive the experience of early radio pioneers. This baby really works! Wind your own inductor, wire up the earliest radio circuit without soldering a thing and listen to the magic of radio that needs no power. Put up an antenna, connect a ground. Stations will come in amazingly loud and clear. 1¾x5x6½". Has antenna wire, earphone. *Simple level.* Order **VEC-121K, $19.95.**

Full featured CW Keyer Kit is the best electronic keyer bargain in radio! Self-completing dot-dashes and dot-dash memory forgive timing errors. Front panel volume/speed (3-65 wpm) controls. Weight adjusts 25-75%. Sidetone (300 -1000Hz) has LM386 audio amp for external speaker. Iambic A or B, fully auto or semi-auto "bug" mode. Sleep Mode battery saver. Use 9V battery. 1¾x4x 3½ in. *Simple skill level.* Order **VEC-201K, $24.95.**



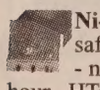
CW Memory Keyer Kit stores 512 characters in four 128 character non-volatile EEPROM message memories. *Carry on entire QSOs by just pressing memory message buttons.* True sinewave sidetone with soft rise and fall time eliminates harsh keyclicks. Has all features of VEC-201K CW Keyer Kit. 1¾x 6¾ x5¼ in. *Simple.* Order **VEC-221K, $69.95.**

Tunable SSB/CW Audio Filter Kit has sharp *four* pole peak and notch filters. Zero in with frequency control & adjust bandwidth for best response. Tune frequency from 300-3000 Hz. Notch is an outstanding 50 dB. 1 Watt amplifier. Speaker/Phone jacks. 12 VDC at 300 mA. 1¾x4¾x5¼ in. *Intermediate skill level.* **VEC-841K, $34.95.**

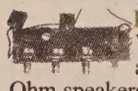
Super CW Audio Filter Kit gives you three bandwidths: 80, 110, 180 Hz. Eight poles gives super steep skirts with no ringing. Pull CW QSOs out of terrible QRM! Plugs into phone jack to drive phones. QRM down 60 dB one octave from center frequency (750 Hz) for 80 Hz bandwidth. Improves S/N ratio 15 dB. Use 9V battery. 1¾x4x 3½ in. *Simple.* **VEC-820K, $19.95.**

Super CW filter/ amplifier Kit has powerful 1 watt audio amplifier to drive speaker. 8 poles active IC filtering uses cascaded low-Q stages. 3 bandwidths: 80,110, 180 Hz. Center frequency: 750 Hz. Up to 15 dB. Use 9-18VDC, 300 mA max. 1¾x4 x3½ in. *Simple skill level.* Order **VEC-821K, $29.95.**

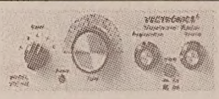
Super SSB Audio Filter Kit improves readability with 8 poles, optimizes audio bandwidth, reduces SSB splatter, low, hi-pitched interference, hiss, static crashes, background noise. Use 9 Volt battery. 1¾x4x 3½ inches. *Simple skill level.* Order **VEC-830K, $19.95.**



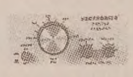
Ni-Cad/Ni-MH Battery Charger Kit safely quick charges expensive batteries -- no overcharging -- many in less than an hour. HTs, cell phones, camcorders, lap top. 1¾x4¾x5¼ in. *Moderate.* **VEC-412K, $49.95.**



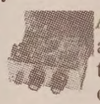
Portable CD Amplifier Kit has 4 Watt per channel amplifier. Plug in a portable CD player and a pair of 8 Ohm speakers.Fill your room with music. 12V battery/12 VDC. *Simple.* **VEC-1604K, $19.95.**



Shortwave Receiver Kit lets you listen to the world! Covers 75/80, 49, 40, 30, 31, 20, 25, 22, 19, 17, 16, 15 and 13 Meter bands. Explore AM, SSB, CW, WWV, RTTY and Packet signals. Vernier reduction drive, smooth regeneration control, RF stage. *Includes all metal cabinet.* 2 earphone jacks. Use 9V battery. 2½x7x6 in. *Intermediate skill level.* **VEC-102K, $69.95.**



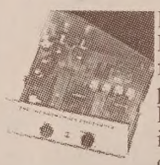
2 Meter Monitor Kit receives 144-148 MHz. Low noise, high gain RF preamp gives you excellent 0.1 uV sensitivity. Air variable tuning capacitor has 8:1 reduction. Dual conversion superhet provides selectivity and stability. Automatically eliminates squelch tails. Built-in speaker, squelch, tone, volume controls.19¼" antenna. 9V battery. 2x4¼x4". *Intermediate skill level.* Order **VEC-104K, $79.95.**



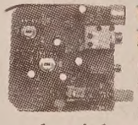
Aircraft Receiver Kit tunes entire voice aircraft band 118-136 MHz. Picks up air traffic 100 miles away. Track progress of incoming/outgoing traffic in your area, gain advanced weather information, and discover how the National Air Traffic System really works. Great way to learn about aviation. Use 9V battery. Drives external speaker/phones. 1¾x4x3½ in. *Intermediate.* **VEC-131K, $29.95.**

Shortwave Converter Kit converts AM or AM/FM radios to shortwave receivers at a push of a button. Choose 2 1 MHz bands between 3 and 22 MHz. Popular 13,16,19, 25, 31, 41, 49 and 60 Meters international bands. On/off bypass, NE-602/612 mixer-oscillator IC and tuned input circuit. 9 V battery. 1¾x4x3½". *Intermediate.* **VEC-101K, $27.95.**

49 MHz Wireless Band Monitor Receiver kit lets you explore weak wireless signals from miles around. Baby monitors, cordless phones, walkie-talkies, wireless intercoms and more! Electronic tuning covers just the 49 MHz band. *Intermediate skill level.* **Order VEC-1016K, $34.95.**



Emergency and Business Band Receiver lets you gather news first hand -- tune in local fire, police, ambulance, business, etc. Master 2-way radio lingo, operating procedures and police 10-codes as you find the "real story"! 9V battery. *Intermediate.* **VEC-1012K, $34.95.**



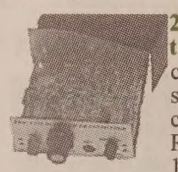
Voice Activated Recorder Switch Kit can remotely and auto record conversations, speeches. Don't waste tape by not recording silence. Plug in remote recorder jack and it activates when it hears speech. Built-in mic, on/off. Use 9V battery. *Simple.* **VEC-483K, $19.95.**

Counter Surveillance Monitor Kit lets you search out and remove electronic bugs! Highly sensitive wideband receiver detector. Higher pitch audio occurs when bug is near. 9 V batt. *Moderate.* **VEC-8218K, $39.95.**

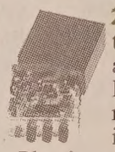
The Giant Book of Electronic Projects VEC-1901, $19.95. Includes 19 kits on this page. Building tips, complete parts lists, parts placement,PC board layouts, test/alignment, more.

QRP Transceiver Kits for 80/40/30/20 Meters give you VXO frequency control, broad-banded transmitter circuitry, solid one Watt plus output, shaped keying, .3 uV sensitivity, direct conversion receiver. Includes crystal for popular QRP frequency. 1¾x 4¾ x5¼". *Intermediate skill level.* Order **VEC-1380K** (80 Meters),**VEC-1340K**(40 Meters),**VEC-1330K** (30 Meters),**VEC-1320K**(20 Meters), **$59.95 each.**

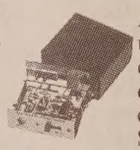
20/30/40/80 Meter Receiver Kits give high performance! Covers entire band or tailor to cover desired portion. Copy CW/SSB/AM. NE602/ 612 mixer-oscillator, LM386 high gain audio amplifier. 1¾x4¾x 5¼ in. *Moderate skill level.* Order **VEC-1120K** (20 Meters),**VEC-1130K**(30 Meters),**VEC-1140K** (40 Meters), **VEC-1180K** (80 Meters), **$29.95 ea.**



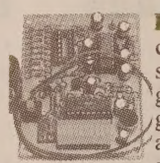
20/30/40/80 Meter QRP CW transmitter Kits have variable crystal oscillator tuning, front panel switch selects 1 of 2 crystals. 1 crystal included. Transmit and Receive switch. Connect receiver. 1¾ x4x3½ in. *Intermediate skill level.* Order **VEC-1220K** (20 Meters), **VEC-1230K** (30 Meters), **VEC-1240K** (40 Meters), **VEC-1280K** (80 Meters), **$29.95 each.**



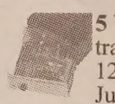
2/6/10 Meter FM Receiver Kits let you tune in the world of amateur radio repeater action with these superb educational kits. Each covers the entire FM sub-band and runs off your 9V battery. Experience what it's like for ham radio operators in your area. Plug in speaker or headphones for clear reception. 1¾x4x3½". *Intermediate.* **VEC-1002K** (2 Meters), **VEC-1006K** (6M), **VEC-1010K** (10M), **$34.95 each.**



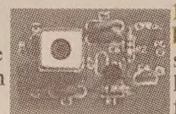
AM Radio Transmitter Kit lets you set up your own AM station and broadcast crystal clear programming from your studio with *you* as the disc jockey. Choose clear frequency from 530-1750 KHz. Standard line level or microphone input. Easy connection. Audio level adjustment. 1¾x4x3½ inches. *Simple skill level.* Order **VEC-1290K, $29.95.**



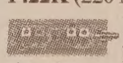
FM Stereo Transmitter Kit lets you connect your CD player, tape or other source and broadcast clear stereo programming on the FM band! Realistic grand movie theater sound! Use to assist hard-of-hearing. Frequency adjusts 88-108 MHz. 9V battery or 5-15 VDC. *Moderate.* **VEC-1292K, $34.95.**



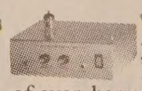
5 Watt 2 Meter FM transmitter Kit lets you transmit voice and data -- AFSK data (up to 1200 baud) and FSK data (to 9600 baud). Jumper select reactance or direct FM modulators. Reliable Motorola NBFM Xmitter IC/PA transistor. Crystal controlled (x8 frequency multiply). -60 dBc spurs, harmonics. 12-14 VDC, 1.5A. 5-pin DIN mic jack. 1¾x4¾x 5¼". *Difficult.* **VEC-1202K, $99.95.**



144/220/440 MHz Low-Noise Preamp Kits soup up your antenna system, pull in weak signals. Great low-noise performance, immunity from damaging electrostatic discharge. 1x1½". *Simple.* **VEC-1402K** (144 MHz), **VEC-1422K** (220 MHz), **VEC-1444K** (440 MHz), **$17.95.**



High-performance 2 Meter Preamp Kit pulls weak signals out of noise. Boosts signals, provides razor-sharp bandpass filtering, eliminates electrical noises w/built-in balun. 9-14 VDC. 1½x3x1". *Intermediate.* **VEC-1402DK, $59.95.**



Vacuum-Tube Preamplifier Kit lets you enjoy the vintage sound of a real life vacuum tube preamp. High degree of even-harmonic distortion. Includes tube, 110 VAC power supply. *Moderate.* **VEC-1680K, $99.95.**

Cases available for most kits listed above, $14.95. Add "C". **Example: VEC-201KC, $14.95.**

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How to Order from MFJ

***Call* 1-800-647-1800** to order or for your nearest MFJ dealer; **(662) 323-5869** outside continental USA; **FAX** to **(662) 323-6551.**

MAIL ORDERS: Send personal check, bank check or money order to: *MFJ, 300 Industrial Park Road, Starkville, MS 39762.* Include payment for item(s) and shipping charges (see chart).

Personal checks will be held 10 working days upon receipt of order.

SALES TAX: Tax **must be** added for OHIO and MISSISSIPPI.

CREDIT CARDS: MasterCard Visa, American Express, Discover. Include account number, name of card holder and expiration date.

FOREIGN ORDERS: US Funds ONLY. See ship chart for details. Call for quote.

NO RISK* ORDERING:** Order any product ***"directly" from *MFJ Enterprises, Inc., Starkville, MS* and try it for 30 days.

If not totally delighted, we'll cheerfully refund your purchase price (less shipping). No books or software.

WARRANTY INFORMATION:

All MFJ products (except as noted) come with MFJ's famous *No Matter What*™ one year limited warranty. Not including kits, books or software.

MFJ will repair or replace (at our option) your MFJ product *No Matter What*™ for one complete year. Customer **MUST** retain dated proof-of-purchase.

REPAIRS/TECHSupport:

Send unit with copy of purchase receipt **to** MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759. **TECH:** (662)323-0549 **E-Mail:** *mfjcustserv@mfjenterprises.com*

UPS/MAIL Shipping Chart

*Code F items cannot be sent by USPS/mail. *Foreign orders must call for quote.*

Ship Code	UPS	USPS/MAIL	Canada	Foreign
A	$10.00	$12.00	$25.00	$100.00
B	12.00	20.00	30.00	150.00
C	14.00	25.00	35.00	200.00
D	16.00	30.00	40.00	250.00
E	18.00	35.00	50.00	300.00
F	27.00	*	55.00	*

All packages 1 lb. and under will be shipped by US MAIL for $6.00 minimum charge unless otherwise specified.

All prices and specifications are subject to change without notice or obligation. Not responsible for errors. Catalog08/64P/05 (c)2005 MFJ, INC.

MFJ *IntelliTuner*™ Automatic Tuner

Automatically tunes any antenna unbalanced or balanced . . . Ultra fast . . . 2000 memories . . . Antenna Switch . . . Efficient L-network . . . Matches 6-1600 Ohms at 300 Watts . . . 1.8-30 MHz . . . 4:1 current balun . . . Cross-Needle and Digital SWR/Wattmeter . . . Aural SWR meter . . . Backlit LCD . . . Remote control port . . . Radio interface . . .

The MFJ-993 *IntelliTuner*™ lets you tune any antenna *automatically* balanced or unbalanced - - *ultra fast.*

MFJ-993
$259.95
Ship Code B

It's a comprehensive automatic *antenna tuning center* complete with SWR/Watt-meter, antenna switch for two antennas and 4:1 current balun for balanced lines.

MFJs exclusive *IntelliTuner*™, *Adaptive Search*™ and *InstantRecall*™ algorithms give you *ultra fast* automatic tuning with over 2000 *non-volatile* revolving memories.

You get a highly efficient L-network, wide 6-1600 ohm matching at full 300 Watts SSB/150 Watts CW, 1.8-30 MHz coverage, Cross-Needle *and* digital meters, aural SWR meter, *backlit* LCD display, remote control port, radio interface, heavy-duty 16 amp/1000 volt relays and more.

New!

It learns while you're having fun

As you're ragchewing, contesting or DXing, *your MFJ-993 is learning!*

When you transmit, the MFJ-993 automatically tunes for minimum SWR and remembers your frequency and tuner settings. The next time you operate on that frequency and antenna, these tuner settings are instantly restored and *you're ready to operate in milliseconds!*

Each of two antennas can learn and remember over a thousand frequencies and tuner settings. They are safely stored in *non-volatile* revolving memory.

Highly Intelligent ultra fast tuning

MFJs *InstantRecall*™ first checks its memory to see if you have operated this frequency before. If so, tuning is instantaneous and you re ready to operate.

If not, MFJs *IntelliTuner*™ algorithm - - based on MFJ s famous SWR Analyzer technology - - kicks in. It *measures* the complex impedance of your antenna. Next, it *calculates* the components it needs and instantly *snaps* them in. Then, it fine tunes to minimize SWR -- you're ready to operate. It's all done in a *fraction* of a second.

When the impedance is within its measurement range, the MFJ-993 is the *fastest automatic antenna tuner in the world.*

If it can't accurately determine impedance, MFJ's *AdaptiveSearch*™ algorithm goes into action. Frequency is measured and relevant components values are determined. Only those values are searched for ultra-fast tuning.

For even faster searches, you can set the target SWR to 2 (settable 1.0-2.0).

You can manually tune when you can't transmit (for listening out of ham bands).

Cross Needle and Digital SWR/Watt Meters

Lighted Cross-Needle and *digital* meters lets you accurately read SWR, forward and reflected power at a glance.

An *aural* SWR meter lets you *hear* the tuned SWR when you can't see or read the meters.

Turn on a highly visible, instant response SWR LCD bargraph when you need it.

Backlit LCD Display

An easy-to-read *backlit* LCD displays SWR, forward/reflected power, frequency, antenna 1/2, L/C tuner values, on/off indicators and other information.

The MFJ-993 is a compact 10Wx2¾ Hx9D inches. Use 12 –15 VDC/1 amp or 110 VAC with **MFJ-1316, $19.95.**

Tune any Antenna

You can tune any antenna — dipoles, verticals, beams, phased arrays, inverted vees, quads, random wires, mobile antennas, compact limited space antennas – practically any antenna.

A 4:1 true current balun lets you tune any balanced antenna - - horizontal loops, vertical loops, multi-band doublets, quads, folded dipoles, Zepps.

Remote Control

Plug in the **MFJ-993RC, $39.95,** remote control and put your tuner at your antenna or elsewhere and control it remotely.

MFJ-993 Interface Pre-wired Cables

Allows automatic tuning of your MFJ-991/993/994 *IntelliTuner*™.

MFJ-5124I, $19.95, *ICOM*. Supports IC-706, 707, 718, 725, 728, 736, 746, 756, 765 and 775 series and others and any Icom that supports the AH-3 or AH-4 tuner.

MFJ-5124A, $19.95, *ALINCO*. Supports DX-70, DX-77 and others.

MFJ-5124K, $59.95, *KENWOOD*. Supports TS-50S, 450S, 570S, 690S, 850S, 870S, 2000 and others and any Kenwood that supports the AT-300 or AT-50 tuner.

MFJ-5124Y, $59.95, *YAESU*. Supports FT-100D, FT-857, FT-897, others.

600 Watt MFJ Automatic Tuner

MFJ-994
$359.95
Ship Code B

New! MFJ-994, *600 Watt IntelliTuner*™! automatic antenna tuner. Similar to MFJ-993 but handles 600 Watts SSB/300 Watts CW, matches 12-800 Ohms. Does not have digital SWR/Wattmeter/LCD display, aural SWR meter/audio feedback, antenna switch or 4:1 current balun for balanced lines. Tuning must be done at low transceiver power with the amplifier bypassed.

150 Watt MFJ Automatic Tuner

MFJ-991,
$219.95
Ship Code B

MFJ-991, *150 Watt Intelli-Tuner*™ automatic antenna tuner. Similar to MFJ-993 but handles 150 Watts SSB/100 Watts CW, matches 6-3200 Ohms. Does not have digital SWR/Wattmeter/LCD display, aural SWR meter/audio feedback, antenna switch or 4:1 current balun for balanced lines. **New!**

MFJ ENTERPRISES, INC.
300 Industrial Park Road
Starkville, MS 39759 USA

TO:

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U.S. Postage
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MFJ Enterprises, Inc.